THE

HUSBANDMAN's JEWEL,

DIRECTING

How to Improve Land from 10*l. per Annum*, to 50*l.* with ſmall charge by Planting. Making Cyder as good as Canary, for 5*d* a Quart or leſs; To Improve Land by draining, and by Hemp, Saffron, Liquorice; To Brew Ale and Beer, make Cyder, Meed, Mum, Metheglin, and other Liquors, to order Bees and Silkworms; Deſtroy Vermin *&c*, To which are added, the Arts of Angling, Hawking, Fowling, Ringing, *&c*, Directions to cure all diſeaſes, of Horſes, Oxon, Cows, Bulls, Calves, Sheep, Lambs, Goats, Swine, Dogs, Conies, Hares, Poultry and ſinging Birds at 12*d.* charge; To Improve Clover and *St.* Foin; To make Table drink for families, both ſick and well, at a Farthing a Gallon worth Gold, good againſt all Diſtempers; And to cure all outward Sores or Pains, Aches. *&c*, at a Penny charge, with divers other matters.

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Gervase Markham

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THE

Husbandmans Jewel, &c.

To Improve Land to 50 or 100 Pound *per* Acre *per Annum.*

IT'S evident in many places, especially in the fenny Country, that by draining the fens, that Bogy Lands, not worth 2*s* an Acre, has been improved to 5 or 6. Pound by Corning, &c, and Mr. *Blith*, in his Excellent Book of Husbandry, says that if you Plant Boggy Lands, with Willow and Sallow, and such like Aquaticks, draining it first well and deep, it will be worth 5 Pound an Acre tho' before it was not worth 2*s* an Acre, and in 11 or 12 Years, the Wood on that Land may be worth 60 Pound an Acre. Also in *Kent* they have improved Ground not worth 6*s* an Acre, to six Pound by Planting in their Hedge Rows, Fruit Trees, about 16 17 or 20 yards distant, the more Room the better, from one another, and one sort of Fruit or other will prosper on any Ground, and if you plant 160 Trees, of the best Pippins and Red-streaks on an Acre, it may reasonably be supposed that one with another, they will yeild 320 Bushels, and 20 Bushels of Apples usually makes a Hogshead, so that there will be 16 Hogsheads on an Acre, and these will make 8 Hogsheads of Royal Cyder, which at 2*d per* Quart, is 2 pound an Hogshead, so that the 8 Hogsheads will yeild 16 Pounds. But this Cyder Royal may be worth 9*d per* Quart, and then an Acre will amount to near 40 Pound *per* Acre, and the Grass will grow the between your Trees, or Gooseberry, or Currants may be Planted betwixt, which is best, for the Grass is apt to be sour and bitter, and by this method you may Probably make 8 Pound *per* Acre more, so that in the whole by a modest computation 50 Pound *per* Acre may be made, but some affirms that above 140 Pound an Acre may well amount to in a Year, but however the Product, no Questi-

on will be very great. Now to make Cyder equal to *Canary*, to a Bottle of Cyder, Botled in *March*, put two ſpoonfuls of the Spirit of Clary, ſold at the Apothecarys, and will be about a penny charge, and if you put a little lump of Loaf Sugar, and a ſpoonful of Brandy, and let it ſtand about a Week, it will make Cyder reſemble *Canary*, ſo near, that a well exerciſed Pallet, ſhall not know the difference: A Planter Writes that if in *March* you put a ſpoonful of Spirit of Clary to your Cyder, it will equal *Canary*, without any more a doe, but you may ſtrenghten it with Spirit of Brandy and Clary, and ſweeten it, and put in your Ingredients more or leſs as you think fit, this Spirit is a ſtrong Spirit but very wholeſome, and has the perfect flavour of *Canary*, ſee more of this by and by, and Read a Book Call'd the way to get Wealth, by making 23 ſorts of Wine equal to *French*, and alſo to make divers other Liquor, and other Curious Matters; and alſo remember that theſe Engliſh Liquors are more wholeſome for the Body than French. *&c.* Every Nation affording that which is moſt proper for it's Natives, and the great advantage that would accrue to the Nation, by Promoting our own Liquor, may be ſuppoſed near a Million a Year, that is ſpent in Foreign Liquor. Alſo by Marl and Soil great Improvement In-Land is to be made as appears about the City of London, and what has been done, may by the like good Husbandry be done again.

To Improve Land.

CONſider from whence the cauſe of Barrenneſs proceeds, whether from Heat or Cold: it from Heat and it lye near any River convenient, over flow it, and when it is pretty well ſoaked, open Trenches to draw it off: then Mud it over with the Caſting of ſome Ditch, Lake, Pond, *&c.* Inſtead of Dung, ſpread the ſoil when dry, and breaking the lumps in the nature of Dung Harrowing, and after a large Shower of Rain, turn it up with a large Plow and let it lye till ſome more ſhowers have fallen on it, and then Plow it over again lightly, and ſow your Seed and you will have a large Crop, a Third more than uſually.

If the Ground be Cold, lye low and Mooriſh, ſubject to Weeds, Flaggs, Ruſhes, *&c.* Make Trenches lower than the Weeds to Drain it thorowly, or it will ſignify nothing, then marle it over with Marle or Chalk, and let it lye till the Rain diſſolves it, then Plow it in high Land Ridges, that the Water may fall off into the Furrows, turning

ing the ſoard downwards, that it may Rot more ſpeedily, thus let it lye a Month or ſix Weeks or more; then ſcatter over it Wood-Aſhes, Sea Coal-Aſhes, or Soap-Boilers Aſhes; let them be waſhed in by the Rain, and then with a Trenching Plough in convenient places draw the Water out of the Furrows, into Water Courſes, and then ſow the Seed, and in a Year or two the Ground will be good, if not two ſubject to overflow, and when you have done with it for Corn, lay it Fallow, and by marling it every other Year it will afford Excellent Graſs and become good Paſture.

To improve paſture if it lye Low and wet, whereby it Chills the Roots, and produces Weeds, &c. Caſt on it Hogs Dung, Horſe Dung and the Dung of any Fowls, mingled with Slack'd Lime, or Lime Stones, which being well ſoaked, Plough up the Land, turning down the Green Soard, yet raiſe the Ridges of the Land but a little ſloping, and ſo run a Trench Croſs-ways very deep, or as you ſee it otherwiſe convenient, and lay it Fallow; by this means it will be much dryer, and the next Graſs young, ſweet and tender.

If your Ground be a Burning Sand, then Oſie it over (as before directed) and if it is troubled with Ant-hills, open them to the bottom, or rather lower, and the wet will drive them away, and if you Scatter Slacked Lime or burnt Pitch and Brimſtone on them, and it will kill them. If with Mole-hills, at the end of *March*, or beginning of *April*, take their Neſts, or ſet a Pott Trap in the Ground, even with the ſurface in their Tracts and they'll fall into it. If the ground is troubled with Gaurſe Tanſie, Fern, Thiſtle &c. pull them up, Hoe or ſtrike of the Tops, that the Root that remains being over Charged with Sap may periſh.

And to raiſe immediately a good Soard, and prevent Weeds growing, you muſt Dung your Grounds, and ſpreading the Dung ſuffer the Rain to ſoak in, levelling the Land with a Rowler, and ſuffer not heavy Cattle, if it lye Low, to Graze when the Rain has made it ſoft, for by treading they will ſpoil it's growing when ſoft; and if you intend it for Hay, then no Cattle muſt come in it after *Lady-Day*, leaſt by Croping too near the young blades of Graſs, they ſpoile the firſt cutt, and hinder the latter alſo. Read more of theſe things in *Blith*'s Husbandry a Book wrote by Experience, and the only Book of Husbandry Extant, the Fourth Edition with large Aditions. Sold at the Ring in *Little Brittain*. Price. 3*s*,

To improve Ground by Hops, Flax, Liquorice and Saffron.

FOr a Hop Garden, chooſe a good mellow Ground, and rich Ground, not two hot, moiſt nor Cold, well ſheltred by Trees from ſtrong Winds that may rend the Vines from the Poles, turn it up deep with a Plough or dig it with a Spade, and caſt it up into little hills or Rows, with Alleys betwixt the Hills about two foot diſtant from each other, then take your beſt Sprouts, or for want of them the Growth of ſlips, and making four or five holes in a Hill, crumble in ſome Mold lightly, and put the ſlips or Sprouts into the holes, and ſo cover them up, do this in the beginning of *April*, obſerving, if time will permit, the Moon to be in the Increaſe, and to every Sprout that riſes well, fix a Pole and ſuffer that to twiſt about it. Obſerve to ſet them all Inclinning towards the *South*, that the Sun may the better compaſs them, for this is moſt evident, a bending Pole has more Hops than an upright. And a Gentlemen in *York-ſhire*, places his Hops in ſuch ſort that one Plant may not ſhadow another, but that his whole Garden receives the fulneſs and ſtrength of the Sun Beams at once, whereby his Hops are more kindly, and the Bells much larger than any other Hop Ground, whoſe Poles are erected and ſtand upright after our ordinary and groſs manner. To return I ſay fix the Pole for them to twiſt about it, the Pole being 8 or 9 Foot above Ground at leaſt, being full of Snags, for the better ſupporting the Vine. At *Lamas Tide*, you will find them Belled and when you find them fit to cut, cut the Vines by the Root and take them off with the Poles into a plain place and gather them, dry them on a Kiln, and Bag them up, an Acre of Hops are ſometimes worth 100 Pound.

To Improve Land by Flax.

PLough up a conſiderable mellow Ground, and having a good ſort of Seed ſow it in the middle of *April*, if poſſible in the Moons increaſe, having before improved the Land with fat Soil from the ſtreets, or ſome Oiſe place, caſting the Seed 2 Buſhel to an Acre and when it appears above Ground, whilſt young, take care that the Weeds over grow it not, tho when it has out ſtipt them it needs no Weeding, for the

the Land being ſome what moiſt it will grow to an Extraordinary height; when ripe, which is known by the Yellowneſs of the outward Rind, and the ſwelling of the Seeds, then muſt you pluck up the Stalks, and bind them up in little bundles, ſuffering them to dry in the Sun, then lay the bundles in Water, ſoaking them with heavy weigth, and when you find the Rind looſe, then are they ſteeped enough, then take them out and unlooſe them, again drying them in the Sun, and ſtrip off the Rind, which you muſt hackle on Crins of Iron, &c. Fit for uſe. an Acre well managed, will bear 30 or 40 Pounds worth of Flax, when dreſſed and ordered to the purpoſe. Hemp Seed ſteeped in plain Salt-peter, diluted in Water, and other fit Earthy ſubſtance, in its due time, arrived to the Talneſs that it rather ſeem'd a Coppice of Wood of 14 Years growth, than plain Hemp.

Of Planting and Grafting

IN Planting obſerve when you remove any Tree to mark it in the Rind, that you ſet it the ſame way it grew firſt, bring with you as much of the natural Earth as you can, and over and above, adding a ſmall matter of Dung and freſh Mold, curing off part of the top Branches, that they may not draw away too much Sap before its well Rooted.

In Grafting there are ſeveral methods to be obſerved, and firſt when you have taken the Scion, which muſt be from the body of the Tree, and not a top Twig; You muſt ſaw off your Stock, about 3 or 4 Foot above the Ground, then cuting the Twig flat at the great end, but not the Bark off, ſlit the Stock with a Knife or Chiſell, and put in the Scion that both barks may toutch, then with Dung and Clay, well tempred together bind it up cloſe that neither Air nor Bugs can enter and let it continue.

Secondly there are ſome who bore a hole a ſloap into the heart of the Tree, and ſo put the Scion in. Thirdly, they take a Bud from one Tree and ſlitting the Bark of another Tree, let it in and ſo cloſe them together. Fourthly there are thoſe that ſlice off a Bud, or Scion with the intire Bark and plaiſter, and by opening the Bark of a Branch into another Tree, and all theſe ways ſometimes hit.

In

In Grafting the Fig will grow on a Mulbery, the Apple or Pear, on a Quince or Crab, the Damſon on a Wild Thorn, Peach and Cherry upon a Peach, the Apricock on a Plumb, the Wal-nut upon the Aſh, the Quince on the Barbary, the Almond on the Philbeart, the Vine upon the Cherry-Tree and ſo of other, which are better and improved by Grafting.

To improve Liquorice.

LIquorice greatly improves Ground, and is of a laſting quality; to order it, dig your Ground very deep, then mellow the Mold, and caſt it up into Banks, making Alleys between the Banks, being about two Foot high, then take your Crown-ſlips, and make Holes with a ſetting Staff, upon the Banks in a line, put in the ſlips, having firſt crumbled in ſome ſoft Mold, covering all but the Top, and as the Leaves ſprout, draw the Earth about them, with a ſmall Hoe, and Water not the Plants, except the Weather be exceſſive dry, and then but very little, and that in the Evening: and becauſe you can expect but little Benefit of theſe Plants, the Firſt and Second Year, you may Sow Onions, ſet Potato's, Beans, Cabbage, or any thing of the like nature between them, and the 3d Year about the beginning, you may draw and dig the Plants, and dry them in a Hot-houſe, Killn or Stow, and a good Acre of Liquorice will yeild 90 Pound.

To improve Saffron.

SAffron is a great Improver of Land and will grow in indifferent good Ground, where it is not Stony nor two wet, and in this caſe having Ploughed your Ground into Ridge Lands, as for Corn or Peaſe, take your Roots, a Buſhell of which will ſet an Acre, and having drawn a Drill with a large Hoe, place them therein with the ſpurns downwards, about three Inches aſſunder, then draw another Drill, ſo that the Mold of it may coverup the former, and in that place, others in the ſame manner, and ſo ſucceſſively till you have ſet the Roots, and when they Spring up draw Earth about them, and theſe ſet in the beginning of *July*, and if the weather be exceeding dry, you may ſometimes Water the Top Ranges, and in *September*, the Blew Flowers appears, and in it upon opening three or four Blades of Saffron, which you muſt obſerve to gather out Morning and Evening for a Month

together, the Flowers Continually encreasing. The Saffron being gathered, made a Kiln about half the bigness of a Bee Hive of Clay and Sticks, and so puting a Gentle Fire of Charcoal under it, tend it by often turning, till you have reduced, three Pound of wet Saffron, to one dry, an Acre may yeild 40 or 50 Pound, the two Crops for the Root will yeild no more, without being renewed or Transplanted. Read more at large of these things in *Blith*'s Husbandry.

Of FLAX.

FLax will yield 30 or 40 Pound an Acre, Baren Sandy and Heath Ground is best for it, and after Flax, Turnips; one Acre of good Flax is Accounted worth 3 or 4 Acre of the best Wheat, and the Liquor hath much advanced the goodness thereof. The best time to Sow it is about the beginning of *April*, presently after a Shower of Rain, some Sow it to the End of *May*, and some after.

A Gentleman Planted 100 Ashes, and Lived to see them Sold for 500 Pound at 50 Years growth. *Blith Husbandman* page 163.

If you cover Cherry, Plums or other Fruit Trees, with a rough Canvas, or other Cloth in Summer, and wetting of the Cloth often, it will keep the Fruit back a long time, that you may have it when others are gone.

If you put a Branch of a Cherry, Vine, Apricock, &c. in at a Window, and nail it to the Seeling of the House, Fruit will grow within Doors.

A hot Bed of Horse-dung laid a Foot high, and supported on the sides, and Mould laid thereon 3 Fingers deep. If you Sow Cucumber-Seed, Turnip-Seed, Wheat or Pease, it will come up half an Inch above the Ground in two Days; this is a Notable Experiment. Try also Cherries, Strawberris and other Fruit, that are dear when they are Early.

Strawberries water'd once in three Days with Water wherein Sheep Dung is steeped, or Pigeons Dung will come early, a good and Profitable Experiment.

Canker'd

Canker'd Fruit Trees.

CAuſe the Earth to be taken away round it, about four Feet from the Stem, and about 5 or 6 Inches deep, and in room thereof cauſe Stones to be ſet cloſe and near together, in dirt taken out of the High-way, inſtead of Gravel after the manner that Streets are pav'd, and it will Proſper, and bear to admiration; do the ſame to other Trees, with a proportionable quantity of Chalk, and ramm it faſt about the Trees, and it will have the like Effect as the Paving; tho' it will not laſt ſo long as Paving.

To make Trees grow much.

WHen any Young Trees, as Aſh, Elm, Birch, Oak, but Aſh eſpecially, are in their Bodies about two Inches Diameter, which they are at three or four Years growth, then take a piece of a Coat of Mail, or ſome ſuch like Net of ſmall Wier, or Hair Cloth and putting it in the Palm of your Hand, rub it pretty hard, but not to tare off the Bark; twice in a Year, and you will find ſuch Trees will out grow the reſt very much.

Mr. *Wolridge* ſays, That if our Waſte and common Down Grounds were incloſed, it would Feed more Sheep and Cattle by half than they do lying open; and that in caſe ten Acre were Sown with Clover-Graſs, Turnips, Cole-Seed, Parſely, or the like, they would feed as many Cattle or Sheep, as 100 Acres of the ſame Land would do that is laid waſte.

To make Butter better than ordinary, without ſeting the Milk for Cream.

AS ſoon as the Milk comes from the Cow, and is ſtrained, then Churn it, as uſually Cream is done; alſo the Cheeſe made of the Butter Milk will be better than the

best two Meal Cheeses that you ever did eat; and one Pound of this Butter shall be better than a Pound and half of the best Butter made of Cream. *Probatum. Hartlib's Legacy.*

Urine. In *Holland* they preserve the Cows Urin as carefully as the Dung for their Land; old Urine is very Excellent for the Roots of Trees, *Columella* says, That a good Husband may make 10 Load of Dung for every great Beast in his Yard, and as much for every one in his House, and one Load for small Cattle, as Hogs; this is strang to us, and I believe there are many ill Husbands by this Account. I know a Woman near *Canterbury*, who saveth in a Pail, all the droppings of Urine, and when the Pail is full sprinkleth it on her Meadow, which causeth the Grass to grow much, at first it looks Yellowish, but after a little time it grow'd so wonderfully, that her Neighbours were like to have accused her of Witchcraft. *Hartlib.*

St. *Foin*, or Holy Hay, commonly called Cinquefoin.

IT'S a mighty improver of dry and barren Ground, and excellent for feeding Cattle, in *France* they sow these Seeds, and Oats a like quantity, on Ground out of Heart, and Mow their Oats only the first Year, that it may root well, yet they may Mow it the first Year, but its not so well, but the Year following you may, and so for seaven Years, it commonly bears four Loads or more on an Acre; after seven Years break it up, and Sow it with Corn till it be out of Heart, and then Sow it with St. *Foin*, as before, for it does not impoverish Land as other Annual Plants do, but enriches it, when the Roots is turn'd up by the Plow; I have seen it thrive well in *England* on Chalky Banks, where nothing else would grow, and such dry barren Ground is fittest for it; (as moist Rich Land is fit for *Clover-Grass* and great *Trefoil*) (tho' St. *Foin* will grow pretty well on all Lands) and will Flourish, it Rooting deep, when other Grass is Parched by heat; but wet Lands soon corrupts its Root. For the right managing of it, observe these Rules, or it will come to little.

1. Make your Ground fine, and Kill all other Grass or Plants. for they will choke it.

2. Be

2. Be not too ſparing of Seed, for the more you Sow the thicker it will grow.

3. Expect but ſeven Years Crop, and then Plow it up, or Sow it again with the ſame Seed or other Grain.

4. Let not Sheep or other Cattle bite them the Firſt Year.

5. Your beſt way is to make your Ground Fine, as when you Sow Barly, and Harrow it even, and then to Plow theſe Seeds in alone, without any other Grain, as Gardners do Peaſe, but not at ſo great a diſtance; but make your Range about a Foot diſtance one from another, and they'l ſee it Flouriſh like Green Peaſe, eſpecially if you draw the Plow through them once or twice that Summer, to deſtroy Weeds and Graſs; and if you do thus great Clover and other Seeds, may be mow'd twice the firſt Year. There is another ſort at *Paris*, called *La Lucern*, which is not inferior to St. Foin, but rather better for dry barren Land, and is to be managed as St. Foin. Thus you may improve barren Ground of 2 or 3*s.* an Acre, to forty or fifty Shillings an Acre. There is a Graſs at *Madrington* near *Salisbury*, that is 24 Foot long, with which they feed Hogs. I queſtion not, but if the Seeds of it were ſown in Rich Meadows, it will yield Extraordinarily.

Mr. *Worlidge* ſays, That for Clover-Graſs, a Rich light Land, warm and dry, will afford a great Profit: that a Parcel of Ground, a little above two Acres of Clover-Graſs, the ſecond Year yielded in *May* two Load of Hay worth 3*l.* the next Crop of Seed was ripe in *Auguſt*, and yielded three great Loads worth 9 *l.* that Year, the Seed was 300 *l.* which with the Hay was Valued at 30 *l.* beſides the after Paſture. Another preſident is, that on 4 Acres grew 12 Load of Hay at twice Mowing, and 20 Buſhel of Seed; one Load of Hay that was Mowed in *May*, was worth two Loads of other Hay, and the after Paſture three times better than any other, though four Acres in one Year yielded eighty Pounds.

Another. That 6 Acres of Clover, did maintain 6 Months 10 Oxen, 13 Cows, 3 Horſes, and 25 Hogs, Valued at 40 *l.* beſides Winter Herbage. It will proſper pretty well on any Ground that is not poor. Clover-Graſs laſteth but three Years. An Acre of Ground will take 10 Pound of Clover-Graſs-Seed, in Meaſure about half a Peck. The more you Sow the better, ſome have Sown 16 Pound on an Acre with good Succeſs; let your Seed be the beſt, and then in *March* or *April* Sow your Clover-Graſs upon your Barly and Oats being harrowed, or you may Sow it alone, and you may cut it about *June* the firſt Year. If you Sow it alone, the beſt time is about *Michaelmas*, and a-

bout the end of *May* you may cut the first Crop, the exact time is when it begins to knot, and after feed it with Cattle till *January*: if you will preserve Seed, expect but two Crops that Year, the first as before, the second must stand till the Seed comes to a dead ripeness. After your Seed is Thrasht the Cattle will Eat the Stalks, but if too Old they will not. After two Years standing, if you let it shed its seed, it will store it with Clover; and one Acre of this Grass will feed as many Cows as 5 of the other common Grass, and your Milk will be much better, and exceed in quantity, and it fattens well. In *Flanders* they cut it daily, as your Cattle eat it, and give it under Trees, or in Sheds in Racks. Let not your Cattle at first eat too much of it least they furfeit. When its throughly dry, in *March* Thrash it.

Of Bees, and how to manage them to great Advantage.

BEes are both Delightful and Profitable, if managed with Care, in order to which, I shall give these short Directions.

If you have no Stocks of Bees, but must buy them, I advise you first, not to give Money for them, but some other Commodity; for tho' there be nothing in it but a Superstitious Observation, yet things often dishearten People that are apt to credit such Reports. Having Purchased, you must be sure to carry them gently in a Sheet between two Persons, on a Pole, in the Night-time, that they be not disturbed, nor their Combs disordered; the best time to remove them is in *April*, and then carry them to a Pleasant Place, lest they leave you, nor must you immediately open them after you have placed them in your Garden, but wait till they are at rest, which you will know by their ceasing humming; be sure place them that the Hive Mouth be to the Rising of the Sun, observ that the Air and Water, as also Herbs, Trees and Flowers about them be very Wholsome. Those they much delight in, are Rosemary, Cassia, Thyme, Saffron, Bean-Flowers, Mustard-Seed, Flowers, Pinks, Mellilot, Poppy, Roses, and all Sweet Flowers, Herbs and Trees. Those they dislike, are Worm-Seed, wild Cucumbers, Elms, Spurge, Laurel, Southernwood, and all bitter Herbs and Trees, delighting most in Vallies, and near Purling Streams.

The

The beſt Honey is extracted from Thyme, the next beſt from Wild Thyme, and the third from Roſemary, tho' there is good Honey where none of theſe grow: alſo where your Clovergraſs, St. Foin, &c. grows, good and much Honey is produced. Be ſure, if you intend to mind Bees, that you be cleanly and ſweet, and Eat no ſtinking things, as Garlick, Onions, &c. leaſt they ſting you, and keep their Hives clean from Cobwebs, Moths and other Filth, or they'l not thrive. Read more of theſe Matter in Mr. *Worlidge*, his Compleat Bee-Maſter, price 6*d.* and *Ruſden* of Bees, price 1*s.* 6*d.* and *Butler* of Bees, price 1*s.* The only three Books Extant on this Subject. All ſold at the Ring in *Little-Brittain*. In the beginning of *April* Bees begin to Work, and if they ſtand in a Pleaſant place, they will work ſo chearfully, that they will afford Honey three times in a Summer, *viz.* the latter end of *May*, the latter end of *July*, and the latter end of *Auguſt*, if the Summer be temperate; tho' if you would have them ſubſiſt well in Winter, to take their Honey in *May* and *July* is ſufficient,

If it happen that by reaſon of the Young Brood, the Hive be overcharged, which by their cluſtring about the Mouth of it, and Humming, you may plainly diſcern; prepare a New Hive, ready rub'd, with Fennel, Bean-Tops, Thyme, Balm, Marjoram, Bean-Flowers, Milk and Honey, Hyſſop, Mallows, and with ſome of theſe rub the Hive well, but rather with a Sprig, or Branch of the Tree they ſwarm on, then dip ſuch Sprig or Branch in Mead, or Honey and Water, or with Milk and Salt, or Salt only; and when you have rub'd the Hive well with the Herbs, that tis wet, obſerve the coming out of the Young Bees for ſeveral days, eſpecially when the Sun ſhines hot on them, leaſt they Swarm on a ſudden, and take Wing and Fly away, which is prevented by Ringing on a Warming-Pan or Candle-ſtick, &c. when you ſee they are ſettled either on Tree, Hedge or Ground; if they ſettle on the Ground, lay the Hive prepared as before directed over them. If on a Tree, take your Hive rub'd with Sweet Herbs, and let one hold up the Hive, and another with a gentle Hand ſhake the Bough they hang on, that they may fall into the Hive, then immediately ſet it on a large Cloth, and take Boughs that are Green, and put juſt under the place you take the Bees from, and cover them with ſome more Boughs, and the Corner of the Cloth they ſtand on, and let it reſt till all the Bees are gone in. If in a hard Winter Honey fail, then repleniſh their Store with Brown Sugar mixed with Anniſeed-Water, till its juſt Liquid, and by ſtiking long pieces of fit Cane with it, and then put the Cane gently into

the Mouth of the Hive. You may give them also Honey and Raisins after the same manner. Be sure you cover them with warm Housings of Staw, and feed them with Care, and they'l reward your Pains Bountifully.

Thus I have given you the Opinion of several of the best Authors, for the improving of this Noble Insect, and that with as much Brevity as possible.

Its said Bees will not Fly away, if you smear the Holes of their Hives with the Dung of a Calf newly Killed, *Wicker.*

Bees will not Fly away, if you bruise the Leaves of the Wild and Garden Olive-Tree together, and about the Evenings anoint their Hives with the Juice, or else with Water and Honey, both the Walls and the Hives.

To know if Honey is mixed, or falsified, throw some into the Fire, and that that is false, will not burn clear. *Diophans.*

The best Water for Bees, is That that runs through Stones and Pebbles, and is very clear. This makes them Healthful, and makes good Honey, and you must lay in great Stones and pieces, of Wood for them to pitch upon, when they drink. If you have no Running Water, bring it to them from a Well or Fountain, in Pipes, least they fall Sick with carrying Water.

In taking Honey, you ought to leave them a Tenth part, both in Summer and Winter, but in Winter you must take but one third part. *Dodymus.*

How to Order Silk-Worms the right way.

THe Silk Worms feed chiefly on Mulberry-Leaves, the scarsity thereof is the cause of their fewness; some say they will feed on Lettice, Dandelion, Poplar-Trees, Plum Trees and Apple Trees, but I leave the certainty of it to be tryed by Experience; In the beginning of *May*, the Mulberry Trees begin to spread their Leaves, and the Silk-worms Eggs, are at it were adapted for a release from their Imprisonment; that if you lay them in a Window, in the Sun, or keep them in a warm place about you, but keep them warm in the Night, and they will quickly appear in a new form, cut them some Paper full of little holes, and lay over them, and some of your young Mulberry, Leaves over that, these Worms will Easily find the way to the Food, and as fast as Hatched apply them

themſelves to the Leave; after they betake themſelves to the Leaves, place them on Shelves or Tables, at a diſtant convenient, according to the Number of Worms, and Proportion of place you have for them; in their feeding thy are four times ſick, about twelve or thirteen Days after they are Hatched, and from that time Succeſſively every Eight Days and their ſickneſs, laſteth two or three days, then feed them but little, which is but to Relieve ſuch as are paſt their ſickneſs, before the reſt, and thoſe that do not fall ſick ſo ſoon; the time of feeding them is Nine Weeks; and then feed them twice a Day, laying Leaves over them, and they'l ſoon make way through them, and as they grow in bigneſs, and ſtrength, feed them more Plentifully and oft. Obſerve the Leaves be clear of Rain or Dew before you give them, in caſe they be wet, ſpread them on a Table, you may gather them, and keep them two or three days, in caſe you live Remote from Mulberry Trees, or the Weather prove bad, rid their Shells often off their Dung, and Remainder of their Leaves, by removing the Worms, when they are faſt on new Leaves laid on, for then Eaſily you may remove the Worms with the Leaves; A Principal means to preſerve them, is keeping clean the Shelves of the Room, alſo give them ſome Air in warm Weather, and keep the Room warm in cold Weather, keep them not in a cold moiſt Room; nor too near the Tiles or Top of the Houſe: They will look clear of an Amber Colour, when they are feed as long as able, and are then ready to go to Work, therefore with Heath made very clean, make Arches, betwixt their Shelves, or with Lavender, Roſemary-ſtalks, and upon thoſe the Worms faſten themſelves and make their bottom, which is finiſhed in fifteen days, but the beſt way is to make ſmall Cones of Paper, and with their ſharp ends downward, place them in Rows, in each of which put a Worm, as they appear to you to be juſt going to work, and then they'l Finiſh their bottom moſt Compleat.

When their bottoms are Finiſhed, take as many as you intend for Breeders, then lay them by themſelves, and in Four or Five days time, the Worms within will Eat their wayout, then put them together on ſome Piece of old Say, or the backſide of old Velvet, or the like, made faſt at the Hangings or Wall of the Houſe or on a Tables; theſe Flies will then Engender, and the Male having ſpent himſelf dyes, and the Female doth the like when ſhe hath Lain her Eggs, then with the point of a Knife, put them on a piece of Say, or old Velvets, keep them in a Box among Woolen Cloaths, till next Spring; the Female

will

will lay abundance of Eggs, but a few kept for Increase is Sufficient; the Residue put into an Oven after Baking of Bread, that it be only hot enough to kill the Worms, for their gnawing their way out prejudices the bottom, then take the Bagg, having obtained the bottoms, and having found the end, put twelve or more in a Bason of Water, where a little Gum Traganth is mixed, and then you will Easily wring them, if you feed them not well, the Silk is small and Easily breaks.

Prognosticks of the Weather.

HOw to know when it will be fair, for four or five days together which seldoms fails.

When the Wind hath been in the *North*, or *North-East*, two days, without Rain and sits there the third Day, then go your Journey if the Air be clear.

How to know when it is like to Thunder.

WHen the Wind hath been *South* two or three days, and it grow very Hot, or when you see Clouds rise with great high Tops like Towers, as if one Cloud were upon the Top of another, and joyn'd together with black on the nether side, then it is like to be Thunder and Rain suddenly in many places.

How to know when it is like to be a wet Spring and Summer, and Danger of Rotting Sheep.

If the Eighteen last Days of *February*, and the Ten first Days of *March*, prove for the most part Rainy, then the Spring Quarter, and the Summer Quarter are likely Rainy for the most part, this I have Observed, these Forty Years, and found much benifit by it, if a drought enters in that Season, it is like to be so the most part of the Spring Quarter, if not the Summer Quarter too, and by that Reason there will be Scarcity of Hay.

If *October* and *November* be for the most part Rainy and Warm, then is *January* and *February*, like to be Cold and Frosty; on the contrary, if *October* and *November* be Frosty and Snow, then *January* and *February*, for the most part open Weather.

If

If in the *Autumn* Quarter ground be Flooded, that ground will Rot Sheep, though you give them never ſo good Hay.

If there be no Floods, in the Spring Quarter and Summer Quarter, then Sheep are not Subject to Rot, in the *Autumn* nor Winter Quarter.

To deſtroy all ſorts of Vermin.

TO Kill Rats and Mice, take Wheat Flower and bitter Almonds, and make them into a Paſt, and lay it into their holes, and it will Kill them.

Another, caſt Hemlock ſeed, into their holes, and it will Kill them.

To catch Moles, lay a head of Garlick or Onion before the holes, and they will Immediately come forth.

To Kill Weaſels, Wheat Flower, Sal Armoniack made into a Paſt, with ſome Honey, throw it where the Weaſels uſually come, and they will eat it and it Kills them.

To Kill Piſmires, Origanum beaten to Powder, and ſtrewed before their holes and it Kills them.

To Kill Bugs, or Fleas, take Rue and Wormwood a good quantity, boil them about a quarter of an Hour, then take ſome common Salt, the more the better and uſe it as before.

To Kill Lice and Nits and to cure Scabby Heads; Stave ſaker, and Freſh Butter mixed together, and the Head anointed with it, kills Lice.

To Kill Caterpillars, take Lees of Oyl and Ox piſs, and boil them together, then caſt it upon the Trees or Buſhes and it kills them.

To preſerve Cattle from Flies, take oil wherein Bakeleer hath been boiled, and anoint the Beaſt with it, and they will not come near them.

To make abundance of Cream.

TAke a Skiming diſh full of the Top of the Milk, add to it four ſpoonfulls of ſcraped Sugar, and a drop of good Runnet, then ſtir them together, that they may thicken

a

a little, then ſett it in a warm Place, and a great deal of Cream will riſe in an Hours time.

To Fatten any ſort of Fowl in Fifteen Days.

TAke Nettle ſeed, and Leaves gathered and dryed in their proper Seaſon, beat them to Powder, and make them into Paſt with Wheat, Bran and Flower, adding a little ſweet Olive Oyl, make this up into little Lumps, Coop them up and daily feed them with it, giving them to Drink, Water that Barley hath been boiled in, and they will be fat within the time Propoſed.

For Burns or Scalds.

MIngle Lime Water with Linſeed-Oyl, by beating them well together with a Spoon and with a Feather Dipt in it, anoint the place, grieved till the Fire is gone.

To Brew Ale and Beer.

AN Ingenious Author ſays, That we may Brew as good Liquor at *London* as either *York* or *Nottingham* affords, and that our Derby Malt, Water and Hops, is as good as theirs, and that the difference lies only in the Brewing and well Ordering it. 1. He adviſes to put to one Quarter of Malt 75 Gallons of Liquor, or River-Water, letting it Boil for one Hour, and ſo proportionably for a greater or leſſer quantity, and to every Quarter of Malt half a Pound of Hops; your Malt being ready in the Meſh-tub, pour ſo much Water on it as will wet it quite thro', inſomuch that the Meſh may be rais'd in the Tun a conſiderable hight; then cover it up with Cloth very cloſe two Hours, preſerving the remaining part of the Liquor very hot in the Coopper, if not Boiling. Next the two Hours being expired, work your Meſh with proper In-

ſtruments very well, till you can diſcern no dry Malt in the Meſh; this done let your Meſh Tun run gently into a convenient Veſſel, and when you have let it run about half an Hour, according to the largneſs of the Meſh, put on the remaining part with a Pail, throwing it all over the Meſh by degrees. 3*dly*. Your Worts being all gathered and emptied from the Veſſel wherein you have gathered it, into the Copper, and the Hops put therein, boil it three Hours at leaſt, then empty your Copper into the back Cooller. 4*thly*. While your Worts are Milk-warm, clear it in your guile Tun, while it runs clear from dregs; you may put your dregs into a Flannel Bag, and drain a quantity off clear, and of the Strongeſt Liquor from them. 5*thly*. To your Worts 54 Gallons from a quarter of Malt, put two Quarts of good Yeaſt, and let it work 24 Hours beating it in three or four times a day, according to the Seaſon; Winter requiring great Care. The Guile being well wrought, Tun it up into well Seaſoned Veſſels, leaving liberty for it to Work for about half a Day, then bung it up ſo cloſe. Let your Cask ſtand undiſturbed 6 or 10 Weeks, and it will be Fine and Strong. He ſays that if by accident it does not Work, a Remedy is; Take the Whites of two Eggs, and half a quartern of Brandy, beat them well together, and pour them into the Guile; if the Drink is in the Cask, pour it into the Bung, and lay a warm Cloth over it, and in an Hours time it will work briskly. Remember you under-lay you Cloth that you cover your Veſſel with, that it may have room to begin to work, then take off the Cloth. Another way, take a quarter of an Ounce of Zinziber Pouder, 2 Ounces of fine Loaf Sugar, mix them well with ſome of the Liquor being warm, and pour it in. The beſt time for Brewing is *March* and *October*.

A way to clear Ale or Beer, tho' never ſo thick.

TAke a Pint of Water, half an Ounce of unſlackt Lime mix them well together, let it ſtand three Hours, and the Lime will ſettle to the bottom, and the Water as clear as Glaſs, pour the Water from the ſediment, and put into your Ale or Beer, with half an Ounce of Iſinglaſs well boiled, and in five Hours time or leſs, the Drink will ſettle and clear. This quantity will ſerve a Hogſhead.

To

To make Cyder equal to *Canary* and very cheap.

CYder, of which Red Streak is beſt, is a good Stomach Liquor, purifies the Blood, is Diuretick, and roots out the Scurvy. To make Cyder as good as *Canary*, you muſt make Sweets thus. Take 112 Pound of Sugar, Water 8 or 10 Gallons, in which 30 or 40 Eggs are well beaten and diſſolved; put your Sugar into your Kettle or Veſſel on a gentle Fire, and put to it 4 Gallons of the Egg Water, ſtir all about till the Sugar is diſſolved, when it boils put in more Egg-water, to keep it from boiling too high; and thus continue putting one Quart of another for about an Hour, till your Egg-water is ſpent. But if you prepare your Egg-water in Parcels, to wit 4 Pints at a time, its the beſt way, ſo will the Eggs carry away all the foulneſs of the Sugar, making it riſe in a Scum, and then take it clear; thus having done, boil it to the conſiſtency of a Syrup, which will be clear and pure and cold, is to be put into your Cyder with a little Coriander ſeed bruis'd and tied in a Rag, and this Syrup I call ſweet. Obſerve that you may make them of Brown or White Sugar, the White makes your Cyder a pale Colour, and the Brown of an Amber Colour; the latter may do as well, and this will not ſtand in 6*d* a Quart; put in of this ſweet two or three Gallons, more or leſs as you pleaſe, but let your Cyder be rack'd the laſt time, and paſt the fermentation before you put it in; thus mix your ſweets and the Spirits you intend to put in together, with a little quantity of Cyder, ſtir them well together, and put all into the Hogſhead of Cyder, ſtirring them all together 7 or 8 Minutes with all your ſtrength, with a ſtrong Staff at the Bung-hole, then ſtop it cloſe, and draw none off till three, or four or five Months, and then its fit to Drink. In making it reſemble *Canary*, you muſt uſe more ſweets and Spirits; if you put in the Spirits before Fermentation, they will evaporate and be loſt. That your Cyder thus mixt with ſweets and Spirits, may ever drink well, it muſt firſt be put up into Wooden Casks, and then kept its due time to incorporate as aforeſaid; you may firſt make tryal of a Veſſel of ſeven Gallons, putting in three Quarts of Spirits, and two Quarts of ſweets; and after Twelve Weeks it will be as ſtrong and Pleaſant as *Canary*, and then you may Bottle it up. This Liquor will keep in a Cask three Years, if you keep the Casks

Cask full, but obſerve that in eight Weeks time, the Liquor will waſte about two Pints, which be ſure fill up again with Liquor of the ſame ſtrength, or ſtronger; and thus it will grow better and better. If you chance to keep it too long, and it becomes unpleaſant as old Hock, then take one Hogſhead of your ſtale Cyder, and one of Tart New Cyder, before it is quite fine, and mixing them well together, Tunn them up in two other Hogſheads, adding the proportion of Spirits and ſweets to the quantity of new Cyder, and then it will be as good as ever it was and ſpeedily fit to drink. Wormwood Cyder. To make this, you do by adding Wormwood to Cyder Royal, as you do to Wines; and this is Excellent to procure Appetite, and cauſe Digeſtion.

If you would make Cyder-Royal as ſtrong as *French* Wine, take a Hogſhead of Cyder, and add ſome part of another Hogſhead to it, and Diſtil off the Spirit; this Spirit rectifie a ſecond time, and then put into the remaining part of the Hogſhead of Cyder, fill up the Hogſhead with other freſh Cyder; ſtir it about well, and keep it cloſe ſtopt, except one Day in 9, 10, or 20, you let it lie open 5 Hours, and thus in three Months its fit to drink, and will be as ſtrong as *French* Wine. To make it as ſtrong as Canary, add half as much more of the Spirit to a Hogſhead as you did the former, and two or three Gallons of ſweets more or leſs, to pleaſe the Palate, and it will be as ſtrong as Canary. Experience is gain'd by making many Tryals. 1. That Cyder of the ſtrength of French Wine, requires to every Hogſhead of Cyder 4 Gallons of Spirits, or Cyder Brandy, which is not a Pint of Spirits to four Quarts of Cyder, 2. The ſecond Cyder of the ſtrength of Canary, requires of Spirits 6 Gallons, or Cyder Brandy, to every Hogſhead, that makes about a Pint and a half of Spirits to a Gallon of Cyder, and about three quarters of a Pint of ſweets to the like quantity.

The Spirit of Cyder is Extracted by Diſtillation, in a Copper Veſica, Tinn'd within, with its Worm, from Cyder in all reſpects, as they make *S. V.* And obſerve if the Cyder is prickt or acid, its better for Spirits, and yeilds a larger Quantity then that of the beſt Cyder. *Salmon.*

I am apt to think, that if you put two Spoonfuls of this ſweet, made as aforeſaid; and one Spoonful of Spirit of Clary, and a ſpoonful of Spirit of Cyder into a Pottle, it will be very Rich in a Months time, and will not ſtand in above 6*d* or 7*d* a Bottle. Try Experiments, by putting more or leſs, till you pleaſe your Palate. I conceive with Syrup of Clove-gillyflowers or Spirit of it, or any wholeſome Spirit or Syrup, you may make what talted

Wine you pleaſe. By this Method, Perry, Cherries Currans, Gooſeberry Wine, may be made to reſemble Canary, and as good and wholeſome. Doctor *Hartman* ſays he has obſerved that Brandy, Spirit of Wine or Grain, and other Spirits, if they are Fine may do; and that he has experienced, that the Spirit of Moloſſes, Raiſons, and the Lees of good Wine, with other Fruits if rectifi'd and drawn fine, are as good; and that a rectified Spirit of Malt will ſerve where Spirit of Cyder is not to be had. He ſays that the firſt he compleated was, thus, He put ſix Gallons into a Veſſel, two Quarts of Syrups or ſweets, and three Quarts of the Spirit of Cyder, which after two or three Months he found to be as ſtrong and Pleaſing as Canary. He ſays further, that twenty eighth Pound of Sugar will make four Gallons of ſweets, and ſo proportionably, and the Whites of 8 or 10 Eggs well ſtirr'd and put in as before directed.

To make Mead.

TAke four Pound of Honey, three Gallons of Water, you may put two or four, as you would have it in ſtength; mix or diſſolve them, and then let them boil gently, and clarifie with nine or Twelve Whites of Eggs, taking off the Scum, being only Blood-warm; then add a Pint of Ale-Yeaſt, or a ſmall Leaven diſſolved in a Pint of the Liquor, and let them work, then Tunn it into a Veſſel, and being well ſettled, Bottle it up.

Note. That the Liquor ought to be ſo ſtrong of Honey that it may bear an Egg, and break and boil the ſhells with the Whites of your Eggs; for preſent ſpending you may put the Juice of two Limons to a Gallon, and you may if you pleaſe add Cloves, Cinnamon, Nutmeg, Limon-peel, Ginger, to make it taſte according to the Palate, or you may let it alone. Some put Marjoram, Mint, Thyme, Balm, or what other ſweet Herbs they like; let it ſtand 12 days before you Bottle it, and it will be fine. In a Months Bottleing its fit to drink: if you work it with yeaſt, have a great care to draw it into Bottles; preſently after the Working is over, as in 14 or 18 Days; for Working it with Yeaſt, makes it ſoon grow ſtale, ſower and dead, before you are aware; but if you ſingly work it of it ſelf, and by the Suns help, or a gen-

tle

tle Sand-heat, or *B. M.* without adding Yeaſt or Leaven, it will keep 12 Months, if fill'd to the top, and ſtopt cloſe; if you put Spirit of Clovegilly-flowers into it, it makes it a curious Red Colour.

To make Pleaſant Mead.

PUt a Quart of Honey to a Gallon of Water, with about Ten ſprigs of Marjorum, and five of Bay, boyl all theſe well together, and when it is Cold, Bottle it up, and in Ten days you may drink it.

To make Metheglin.

TAke four Pound of Honey, Water 15, 18 or 20 Pound more or leſs, as you would have it in ſtrength, diſſolve and mix, then put Mint, Sage, Roſemary, Balm, Thyme, Bay-leaves, Angelica, Savory, Roman Wormwood, *Geranium Moſcatum Origanum*, Smallage, of each a handful; Ginger, Cinamon, Nutmegs, Mace, Cloves, all in groſs Powder, and ty'd up in a Bag, of each two Ounces, boil it an Hour, and clariſie with the Shells and Whites of Eggs only, taking off the Scum, then ſtrain it through a Cloth into Wood Veſſels, and being Blood-warm or cool, Tunn it up. *Note*, 1, Some People will put to every Gallon of Liquor a Pound of Black Currants well bruis'd. 2. Keep your Veſſel always near full. 3. Cover the Bung-hole with a Plate of Lead lying looſe on, that the Working of the Liquor may lift it up as need requires. 4. That as it works over, you ſtill fill it up, but not to the Brim, with freſh Liquor of the ſame ſort. 5. That having done working in a Months time, ſtop the Bung cloſe. You need not work it with Yeaſt nor Leaven, for it will Work of it ſelf. Some hang the Spices in a Bag, not Boiling them with it at all. For preſent Drinking, take the Whites of three Eggs, three ſpoonfuls of Wheat-Flower, beat them together, and mingle well with your Liquor, and it will preſently work, when done, ſtop it cloſe with Clay tempered with Salt. 6. If for long keeping, put in a Pound of Hops to every Barrel; in twenty four Weeks draw off the clear into another Barrel, or Bottle it. This will keep many Years. This opens Obſtructions, and Cures Conſumptions. *Salmon.*

PUNCH.

TAke a Quart of Water and a Quarter of a Pint of Brandy, a little Vinegar or Verjuice, or Limon Juice, or Lime Juice, which of them you can get, a little Nutmeg and Sugar, or a little Ginger; and if you pleaſe a little Treacle to Colour it.

To make Punch.

TAke two Quarts of Water, one Pint of Lime Juice, three quarters of a Pound of fine Sugar, mix and diſſolve the Sugar, then put three Pints of choice Brandy, ſtir them well together, and grate in a Nutmeg. This Liquor chears the Heart, and revives the Spirits beyond any other Liquor, Moderately drunk it helps Digeſtion, reſtores loſt Appetite, and makes the Body profoundly Healthful, and able to reſiſt the aſſaults of all Diſeaſes. *Salmon.*

Juniper Cyder, or Wine to make.

PUt 10 or 12 Berries dry'd in a Bottle, or a proportionable quantity to a Hogſhead, Ginger may be uſed with good ſucceſs, and it makes it brisk; Dry'd Roſemary put into it makes it Pleaſant; Wormwoom put into Cyder taſts as Wormwood Wine; Juice of Rasberries, as good as Rasberry Wine; Elder-berries Juice the ſame. Clovergilly-flowers dry'd and ſteep'd in Cyder, gives a rare Tincture and Flavor, and thus you may make Wine of Cyder of any Dry'd-Flowers, Leaves and Roots whatever. *Query*, whether the Chymical Oyl of Mace, Cloves, Nutmeg, &c. will not do the ſame, put in with ſome ſweets, as before is directed.

Brum

Brumſwick Mum to make.

TAke 63 Gallons of Water, and boil till the third part is conſumed, then Brew it with 7 Buſhels of Wheat-Malt, and one Buſhel of Oatmeal, and one Buſhel of ground Beans; Tunn it, but not too full at firſt: put 3 Pound of the inner Rind of Firr, of the Tops of Birch, and Firr, of each 14 Ounces, and three Handfuls of *Cardus Benedictus* dried, two Handfuls of Flower of *Roſa Solis*, of Betony, Burnet, Marjoram, Penny-Royal Flowers, Elder, and with Thyme, of each one Handful and a half, and three Ounces of ſeeds of Cardamum, Barberries bruis'd one Ounce. Put them into the Cask, your Liquor having wrought a while with the Herbs, let the Liquor Work over the Veſſel as little as you can, fill it up at laſt, and ſtop it, and put in then ſome New Laid-Eggs, the Shells not broke nor crackt; Stop all cloſe, and Drink it 25 Months Old; ſome add, Horſe-Radiſh raſp'd 6 Handfuls, and alike quantity of Water-Creſſes, Brooklime, and Wild Parſley. If Mum is carried by Water, it is the better.

Artificial White-wine to make.

N. B. REd-ſtreak Cyder 8 Pound, good Engliſh Brandy and Spring Water, of each 1 Pound with white Sugar half a Pound, mix and let it gently ferment and meliorate, after ſome Months it will have Colour and taſte of White-wine.

Claret Artificial to make.

N. B. REd-ſtreak Cyder 8 Pound, Engliſh Brandy (freed from it's flavour) Spring Water Juice of Bramble-Berrys, of each 1 Pound, white Sugar half a Pound, Roch-Allom about half an Ounce mix and ſtop it up till it's Fine. *Note.* Inſtead of Bramble-Juice you may uſe Alkanet-Root, which gives a true Claret Colour *Salmon*.

Secrets of Sports.

HOw many Changes in Bells, may be Eaſily told, ſet down 1, and under, ſet down 2, then Multiply 1 by 2 it is 2 that is 2 Changes in two Bells; then ſet down 3 under 2 and Multiply 2 by 3 it is 6, ſo there is 6 Changes in 3 Bells, do thus.

$\frac{1}{2}$
$\frac{3}{6}$
$\frac{4}{24}$

Then put down 4 under 6 thus, Multiply 6 by 4, and it is 24. So there is 24 Changes in 4 Bells.

120 Changes in 5 Bells.
720 in 6 Bells.
5040 in 7 Bells.
40320 in 8 Bells.
362880 in 9 Bells.
3628800 in 10 Bells.

The Changes in 3 ſtand thus.

1 2 3
1 3 2
2 1 3
2 3 1
3 1 2
3 2 1
1 2 3

A cheap Family Drink.

A Drink moſt excellent to be drunk at Meals, or in the Morning, or any time of the Day, for all ſorts of People, either Sick or Well, both Winter and Summer, and will not coſt a Farthing a Gallon. Its excellent againſt Stone and Gravel, and for any other Obſtruction, it ſtrengthens the whole Body and quenches Thirſt beyond any

any other Liquor, it begets Chearfulneſs, extinguiſhes all Fluſhings and Vapours, cauſe good Digeſtion, purges by Urine powerfully, if a Quart or more be drank in a morning faſting its good againſt Stone, Gravel and all Griping pains of the Bowels, it clenſeth the Stomach and Veſſels if furd by Intemperance, it prevents Fumes and Vapours, carrying the Windy matters its proper way, good againſt ſhortneſs of Breath, or any ill habits of the Stomach; its excellent againſt Scurvy and Dropſie and is in all reſpects frendly to nature; and they that accuſtome themſelves to it, will find more benefit then I have here ſet down, in Winter, drink it warm as Milk, and in Summer too you may warm it to that degree of Heat you uſually do Ale or Beer: which rather betters it than the Contrary.

Take a ſpoonful of ground Oatemeal and temper it with Water as you do to put into broth, then add a Quart of clear Water to it, Brew it 6 or 7 times out of one Cup or Pot into another and its done.

An univerſal Medicine for all Wounds or diſeaſes.

GOD is often pleaſed to manifeſt his great Power in things, that ſeem very little in our eſteem, as appears by this Medicine of chew'd white Bread, I was ſtruck by a new ſhoed Horſe on the Shin-bone: my Leg ſwelled that my Bone was forced to be cut, I lay'd ſome chew'd white Bread to my Leg when I went to Bed, and next Day the Pain was gone. My Hand was bit through by a mad Dog, I lay'd this to it and Cured it in four Days, I have Cured divers Green Wounds with it, I Applyed it but ſix times, and Mollifyed a Corn ſo, that I took it out Core and Root, and it grew no more, I Cured my ſelf of an old Pain in my Shoulder by it, a great ſwelling in my Throat, Occaſioned by a violent Cold, it broak out like the Kings Evel. I Cured it in four Days, a ſwelled Leg, Putrifyed, and great Holes in it, and all over full of Tulch and Rottenneſs, that it was conceived to be a Gangren, I Cured with it; a Pruning Hook ſtuck through my Thumb-nail and all, I Cured with it, alſo one run into the Knee with a Ruſty Raper, ſo Feſtred, that it was thought it muſt have been cut off; I Cured one Black and B..w from Elbow to Shoulder by a blow, and many other

other I Cured; the quality of it is to ſtench Blood, draw out Poiſon, or a Thorn, to eaſe Pains and heal greeved places, Read more of this and abundance of Curioſities in a Book called the way to get Wealth, by making 23 ſorts of Engliſh Wine equal to *French*, Metheglin, Rum, Rack, Coffee, Tea, Mum, Cyder and 40 ſorts of Ale in a Minute; to make Corn produce a treble Crop, to dreſs Fiſh, Fleſh and Fowl, Accounts caſt up of great uſe to Traders, to Write Letters, Accounts where Coach, Carts and Waggons Inns, to Compound bad Debts, and recover them, and abundance of other Curioſities. Alſo another Book Intituled the way to ſave Wealth by living well for 2*d* a Day, to ſave Coals, Shoes, Candles, Soap, and Cloth in making a ſhift, to Angle, order Bees and Silk-worms, Cattle Powltry, &c. to Improve Land by Hops, Flax, Liquorice to deſtroy Virmin, to ſpeake by Signs; and 20 in the Room ſhall know nothing of it, and by this means; cheating at Cards is plainly Demonſtrated, to feed Horſes fatt without Corn, Hay or Graſs, with many other Curioſities. Alſo another Book Intituled a Thouſand Notable things, teaching ſpeedily to Read, Write and Indite Letters, to ſpeake any Language ſpeedily, the Laws of the City, Obſervations in Planting, Gardening, and Grafting, to catch Birds, to Build and ſave Lime, a cheap way, to take ſpots out of Cloths, the uſe of Dullidge-water, to know what Weather will happen, Rules of Health and how to live long, of Moles, Riddles, Dreams, Stories; to make all ſorts of Ink, to make fine Pictures, of Perfuming, Dying, Colouring, with 900 other Curioſities, price of each Book, 1*s*. 6*d*. Sold at the Ring in *Little Brittain*.

To cure the Farce or Scurf in a Horſe.

HAng a Toad about the Neck of a Horſe, in a little Bag, and it will Infallibly cure him, it muſt be a live Toad; and this I am told cured a Child of the Evil hung about its Neck in a Bag a live, and hang there till it dyes and Stink.

The

The Angler's Inſtructor.

TO be a Compleat Angler obſerve theſe things following.

1. His Cloaths ought to be of a dark Colour.

2. Let your Angling Rod be light and taper, and the top prety ſtiff, and about 4 yards long.

3. The beſt time to provide Fiſhing Rods, is from the 11th of *December* to the middle of *January*, being then freeſt from Sap, Haſle, Black Thorn, Crab-Tree and Yew-ſwitches are moſtly uſed. Let your Stocks and Tops be taper and ſmooth, and each joint neatly ſuited, bind them together 15 Months with ſtraight poles among them, that they may not wrap. If you uſe a Firr Angle rub it with *Aqua fortis* and it gives a curious Cheſnut Colour.

Proportion your Rods and Lines according as the Rivers, Ponds, &c. are in largeneſs; your Lines alſo muſt be in ſtrength proportionable to the Fiſh you expect to catch; For the colour of the Hair, if there be any difference, I prefer a pale water Green, which you may dye thus; Take a Bottle of Allom-water, a good handful of Marygolds, boil them till a yellow Scum ariſes, then put half a pound of green Copperas, and half a pound of Verdigreaſe, and beat them to powder, put theſe into the Allom-water, then put in the Hair, ſet them to cool 12 Hours, then take out the Hair and let it dry.

Let your Line for the Artificial Fly be ſtronger than the Ground Line for the Trout.

5. Your Shot ought to be faſtned about a foot from the Hook. Your Float, if a Quill, make thus, Take two ſoft Gooſe Quills, cut the Heads of each, about an Inch and

and a half, then ſhut them together like a Pin caſe, faſten with melted Shoomakers Wax, put a Pill of the ſame Wax within the end, to keep out Water, with 2 Caps or Rings made of Quill, to ſlip on each end of the Float, for the Line to go between; ſome uſe a Cork cut like a Pear, and bored thro' with a ſmall hot Iron, then put in a Quill of a fit Proportion, then on a Grindſtone rub it ſmooth.

6, In the next Place be provided with a Plummet to try the Depth of the Water.

7. Have Bags of Linnen and Woolen for all ſorts of Baits, and a little Whetſtone to ſharpen your Hook and alſo be provided with a Landing Net, and a Penknife, &c. All your Tackling in Order, go to the River, and find a Place, if you can, that hath a gravelly or ſmooth Bottom, and about 2 or 3 yards in depth, the Stream not too ſwift, then about a yard from the place you deſign to Fiſh at, caſt in a quarter of a Peck of Grains, or as many more if you pleaſe, dip them firſt in the River, that they may ſink the better, and about an Hour after you may begin to Fiſh; for by that time its probable the Fiſh may have found them. If you have not Sport in an Hour, you may conclude there is none, or elſe that Pearch and Pike are there, that live on ſmall Fiſh.

8. Then plumb the Ground, and Fiſh about 2 Inches from the Bottom; the beſt Summer Bait, except in *April* and *May*, their Spawning time, when they are not gone, ſhould be large Wheat, ordered as Furmety, which may be kept 15 or 20 days in Water or Beer, putting in freſh as the Skins grows upon it, if you keep it in Water, when you put any in a Box for preſent Angling, put Wort, or Ale, or Beer, to it a while, or you may boyl good Grain, as Wheat, Malt, &c. in Milk till it's ſoft, or in ſweet Wort which is full as good, and peel off the outward Rine, which is the Bran, and ſo uſe it; or if you pleaſe you may fry it in Milk and Honey, or ſteep it in ſtrong ſcented Oyls, as Spike, Amber, Ivy, Polipody, Anile, Turpentine, Oyl of Peter, Aſſa Fætida. &c.

Your Hook thus baited with a Corn, the point covered with a thin Rind, that you may ſee the White on one ſide, caſt in your Line above the Stream, near the ſide, the Float being upright, ſwimming down the Stream, when you ſee the Float ſink, ſtrike prety quick, according to the ſtrength of your Line; if the Fiſh is too large, make uſe of your landing Net, and after the catching 3 or 4 Fiſhes, caſt in a handful of Grains, and now and then lifting the Float above Water, and ſo you may catch many Fiſhes.

For Ground Angling, uſe it only Evening and Morning, in hot Sun-ſhiny Weather; but if cloudy, at any time of the day.

In

In Winter chooſe the middle of the Day, and where the Sun ſhines on your Face warm, and bait with a little white tail'd Worm found in old rotten Thatch, when you Angle after a ſhower, endeavour to have the Wind on your Back, coming from South or Weſt, the Sun on your Face.

When the Earth is hot and dry, it's to no purpoſe to Angle, or when the Rivers are out, or haſty ſhowers much move the Waters, or when the North-Eaſt Winds blow ſtrongly and cold.

The beſt time to Angle is, 1. When the Weather is calm and clear, or cool and cloudy, the Wind gently blowing.

2. When a ſudden ſhower has a little mudded the Water, then with a red Worm Angle at the bottom in a Stream, and you will have ſport.

If you Fiſh for Carp or Tench, from Sun-riſing till 8 or 9 in the Morning, and from four in the Afternoon till Night. Fiſh bite beſt at a Fly after a ſhower that hath not mudded the Water, and the beſt Months for the Fly are *March*, *April*, *May* and *June*.

Salmon bites beſt about three in the Afternoon, eſpecially from *May* to *September*, and when the Water is clear, and a little Wind, and the Wind bloweth againſt the Stream.

Barbel bites beſt early in the Morning, and till ten a Clock, from the beginning of *May* till the beginning of *Auguſt*.

Perch bite all Day in cool cloudy Weather, but chiefly from Eight in the Morning till Ten, and from three in the Afternoon till five,

Pike bite beſt about three in the Afternoon, in clear Water and gentle Wind; *Auguſt*, *September*, and all Winter he bites all Day long, *April*, *May*, *June* and *July*, he bites beſt early in the Morning.

Bream bites beſt from Sun-riſe till 8 or 9, in muddy Water and a briſk Wind, and in Ponds, the higher the Wind the better; and Fiſh in the middle of the Pond: In *June July* and *Auguſt*, in a gentle Stream or nigh it.

Roach and Dace bite all Day long, but beſt at the Top.

Gudgeon bites in *April*, and till he hath ſpaw'd in *May*, and generally all the Day long, in or near a gentle Stream; Angle for him in a gravelly bottom, ſtirring the Sand with a Pole or Rake, and they'll bite the better.

Flounders bite beſt *April*, *May*, *June July*, in a ſwift Stream, and ſometimes in a ſtill Deep.

Trout bites beſt in a muddy Water, in dark, cloudy, Windy Weather, from 8 till 10 in the Morning, and from 3 till 4 or 5 in the Afternoon; *March*, *April*, *May* and

June

June are the chiefeſt Months. When you catch the firſt Fiſh, take out his Belly, and you may ſee his Stomach, take it out tenderly, for if you bruiſe it you loſe your Labour, and with a ſharp Knife cut it open, and you will ſee what Food he takes at that inſtant.

Keep out of ſight when you Fiſh, and let the Sun be in your Face, or you'll have but little Sport, for if the Sun is on your Back, your Rod will with its Shadow fright them.

To preſerve your Hazel Rods from Worm and Rot, rub them twice or thrice a Year with Linſeed Oyl, Satlate Oyl, or freſh Butter unſalted, or Tallow, very well inſide and outſide, if hollow.

In Summer time when Cattle come to the Fords, their Dung driveth the Fiſh to the lower end of the Ford; then Angle for a Cheven, with baits proper for him.

The Eyes of Fiſhes are an excellent baite for moſt ſort of Fiſhes.

Baits of all ſorts.

BAits for Salmon, is a great Garden Lobworm or an artificial Fly.

Trouts take the Brambling, and all ſorts of Worms, and all ſorts of Flies Menows, young Frogs, Marſh-worm, Flag-worm, Dock-worm, Cod Baits, Bob, Caterpillars, Waſps, Gentle Bees, Graſhopers and Bark-worms.

The Umber takes the ſame Baits, eſpecially the Fly and Cod-bait.

The Barbel takes Cheeſe, Paſtes, Gentles, large Worms and ſalt Beef.

The Pearch takes red Worms of all ſorts, more eſpecially Branding, and Lob-worms well ſcoured, alſo Bobs, Gentles, Cod-baits, Waſps, Menow, and ſome, all baits except the Fly.

Tench takes large Worms, but better if they ſmell of Tar, which you may put a little to the Worms you fiſh with before you Angle, letting them lie a ſhort time leſt they die. Alſo Paſte ſcented with Tar, Oyls, Bread, Grain boyl'd ſoft, Cods-baits, Gentles and Marſh-worms.

Carp takes ſweet Paſtes, Gentles, Worms, Cod-baites, Grait boyled, Bobs and Waſps, and ſometimes with a natural Fly.

Pike Paſtes Gudgeon, Roaches, Dace, Leaches, Smelts, young Frogs, and almoſt all ſorts of Baits except a Fly.

Eels take great red Worms, Waſps, Beef, Guts of Fowls, Minows.

Gudgeon

Gudgeon takes Cod bait, Gentles, Waſps, the natural and artificial Fly.

Bleak takes the ſame bait as the Gudgeon.

Dace, Roach and Bleak takes Cod-baits, Worms, Flies, Bobs, Paſte, Waſps, Cherries, and all ſorts of Worms bred on Trees; Ant Flies they greedily bite at under Water, near the Ground 6 Inches.

Chevin or Chub takes Bobs, Minow, all ſorts of Earth-worms, Flies of all ſorts, Cod-baits, young Frogs, Cherries, Bees and Graſhoppers at the top of the Water, Cheeſe, Grain, Beetles, Waſpes and Humble-bees.

Bream takes red Worms, Paſte, Waſpes, green Flies, Butterflies, a Graſhopper his Legs cut off.

Flounders and Shads take red Worms, Waſpes and Gentles.

Minow, Loach, Miller's thumb or Bull-head, take Worms or Gentles.

To make Paſtes.

TAke Manchet, the fatteſt old Cheeſe, Suet of Mutton Kidney, a little ſtrong Runnet, mix them equally and finely together, then Colour it with a little Turmerick; this Paſte takes Chub, &c.

For Carp and Tench, mix Crumbs of Bread with Honey, or take Kidney Suet, as much Cheeſe, Flower or Manchet, ſoften it with clarify'd Honey. Cherries, Sheep's Blood, Saffron, and Manchet made with Paſte.

You may add to any Paſte, Aſſa Fœtida, Occulus Indiæ, Oyl of Polipody of the Oak, and the Gum of Ivy; and be ſure to all your Paſtes add a little Flax or Cotton-wool, to keep your bait from waſhing off. Man's Fat, and the Fat of the Thigh-bone of a Heron, makes an Oyntment that rarely fails.

Paſte will keep very long, if you put clarify'd Honey and Virgin's Wax into it.

To Angle with an artificial Fly, that is, a Fly in the likeneſs of a natural Fly; you muſt have Fur, Feathers, Wooll, Down, Silk, Woaſted, Bears hair, Camel's hair, Badger's hair, Spaniel's hair, Dog's hair, Sheep's Wooll, Mo-hair, Cow-hair, Camlets, Furs, Hackles or Feathers of a Cocks neck or tail of ſeveral Colours, Silk of all Colours, Wyer and Twiſt, Silver Twiſt, Gold Twiſt, Silver and Gold Wyer. (Read more of theſe in a Curious Book lately Printed called, *The Anglers ſure Guide.* Sold at the *Ring* in *Little Britain,*) and the like, ſuitable and proportionable to the Fly you would imatate. The way to make them, is with ſoft Wax and Silk, binding firſt the Wings on, and after-

wards ſhapening the Body and Head, with ſuch Colours as to reſemble the Colour of the Fly you deſign to Angle with, and be ſure let the Belly be the ſame, and wet your Materials e're you go to Work. Uſe a larger body'd Fly when the Water is muddy or dusky, than in clear Water; and be ſure always keep your Fly in continual motion. When the water is clear and low Angle with a ſmall body'd Fly, with ſlender wings; and when the water begins to clear after Rain, and is of a brownish Colour, then uſe a red or Orange Fly, if the day is clear, then a light coloured one, with a little Body and ſlender wings; if the water be dark or a Whey Colour, let your Line be ſuitable, and twice as long as the Rod. Another way of Angling is called Trouling, which is moſtly for Pike; the baits are Roach, Gudgeon, Dace, Minow, Loach or Frog, put on the Wyer, that the Head being downwards, it may look as if it were playing in the Water, ſometimes managing it high, and then low, near the Place that Pike haunts, when he has taken it, give him Line, and he'll carry it to his Place of Abode, and there paunch it, then range abroad for more, and this you diſcerning by the Lines Motion, wind it up till the Slackneſs ceaſeth, then with a jerk hook him, obſerving this, as for all other Fiſh, that you do it contrary to the Motion of the Fiſh, and be ſure let your Tackle be ſtrong. To Angle for a Pike at the Snap, uſe a double Spring-hook, for he uſually holds the bait ſo faſt betwixt his Teeth, that it's hard to get it forth, or ſtrike him; then with a Spring-hook, the Wyer will draw thro' the bait and hook him if your hook be long; If he lie ſtill, or move ſlowly after he has taken the bait, and you cannot find which way his Head lies, ſtrike directly upward and you will hardly miſs him. He greedily takes a Minow after the ſame manner.

Of the Haunts of Fiſhes.

TO be an experienced or compleat Fiſher, at leiſure times try all waters where you ſuppoſe Fiſh are.

Angle for Perch in gentle Streams of reaſonable depth by a hollow Bank. For Salmon, in large, ſwift Rivers that ebb and flow, gravelly and craggy. For Trouts in purling Brooks, or Rivers very ſwift, ſtrong, or ſandy bottomed. For Carp and Tench in ſtill waters, Ponds muddy, and where Weeds and Roots of Trees are, For Elee, in muddy Rivers and Ponds. For Bream, Pike, or Chub, in ſandy or Clay Rivers, Brooks or Ponds, wherein Bull-ruſhes and Flags grow. For Roach, Dace, Barble and Ruff, in ſandy and gravelly deep water, ſhaded with Trees.

For

For Umber, in clayey Marſhes, Streams running ſwift. For Gudgeon, in ſmall, ſandy or gravelly Rivers; they bite beſt in Spring. Shad, Peel, Mullet and Flounder Thwait and Scant, are found near the Sea, or in brackiſh Rivers. counting Ebb and Flow, where the bottom is fine ſand or gravelly; and ſomtimes all the Fiſh I have mentioned are found in divers waters, therefore try all waters, as above directed.

To keep Baits.

RED Worms keep in a bag of Red Cloath, with a handful of chopt Fennel, mixed with half as much freſh black Mould, will preſerve and ſcour them; or nettles chopt ſmall and put in the bag, or keeping them in moiſt Moſs will do it; or a Diſh-clout dipt in Mutton Suet, and wrap them in it, will keep them well. All other Worms with the Leaves of the Trees they grow on. Cod-baits, Bob and Canter muſt be kept as you find them.

Great white Maggots keep in Sheeps Tallow, and to ſcour them, put them in a warm Bag made of Blanketting, with Sand. Frogs and Graſhoppers, in long Graſs and in wet Moſs, and when you ſpend them, cut off the Legs of the Frog, and the Wings of the Graſhopper.

Flies, uſe as you take them. Waſps, Hornets and Humble-Bees, dry in an Oven, their Heads dipt in Sheeps Blood, and dry'd again; then keep them in Boxes for uſe.

Curioſities in Angling.

EEls. Take a Bottle of Hay, and put in the middle of it Sheeps Guts or Garbage, then tye it up cloſe with a Cord about the middle, then ſink him to the bottom of the River over Night, and leave the Cord out, then when you come next Morning early, pluck out the Bottle ſuddenly, and you will catch many Eels ſticking faſt in the ſides of the Hay.

To bring Fiſh to the place you deſire. Boil clean Water, then put Barley into it, when it burſts: then put Liquorice, a little Mummy and ſome Honey, and beat them together in a Mortar into a ſtiff Paſte, and boil about the Quantity of a large Nutmeg of this Paſte, with a Quart of Barly, till it grows like Glew, then lay it for ground bait, and all the Fiſh will come to it.

An Artificial Cod-bait.

MAke the Body of yellow Bees-wax, and the Head of Black Duben, and black Silk, or make the Body of

yellow Waſh-leather, or Buff, or Shammy, and the Head of black Silk. This bait takes Salmon, Trout, Grayling, Tench, Roach, Chub, Dace, Ruff, Bream, Barble, &c.

Of Baits in general.

OBſerve, that Fiſh takes ſuch baits freely, as the Seaſon or Months afford; therefore when you Angle Morning or Evening, beat the Buſhes about the Rivers or Ponds, and ſuch Flies as you find there fiſh withal, or imitate them with an Artificial Fly. And alſo ſee what Worms or other Inſects fit for baits ſtick on the Leaves or Graſs, or are in the Water, and Fiſh withal, and you may expect good Sport.

To take Fiſh in the Night with a Light. Take a Glaſs in ſhape of an Urinal, very deep, put as much Clay into the bottom of it, as to ſink the Mouth of it within an Inch of the Water, floating with pieces of Cork ty'd about the Neck to keep it ſteady and upright, then place a Candle in it by ſticking it in the Clay Socket, anointing the outſide of the Glaſs with Oil of Aſper, this will make all the Fiſh come about it, then with a Net you may take abundance of Fiſh.

Proper Flies for every Month.

February. PAlmer Flies, little red Brow, the Silver Hackle the plain Hackle, the Gold Hackle, the great blew dun, the great dun, the dark brown.

March. The early bright brown, the little whirling dun, the Thorn-tree Fly, the whitiſh dun, the little black Gnat, the blew dun, the little bright brown.

April. The little dark brown, the ſmall bright brown, the Violet Fly, the great whirling dun, the Horſe-fleſh Fly, the yellow dun.

May. The green Drake, the dun Cow, the black *May* Fly, the Stone Fly, the little yellow *May* Fly, the Camlet Fly, the great Drake, the yellow Palmer, the Turky Fly, the black flat Fly, the little dun, the brown, light the white Gnat, the Cow Lady, the Peacock Fly, the Cow-turd Fly.

June. From the 1ſt to the 24th. The Stone-fly and green Drake, the Barn-fly, the Owl-fly, the purple Hackle, the Fleſh-fly, the purple Gold Hackle, the little Fleſh-fly, the Ant-fly, the Peacock-fly, the little black Gnat, the brown Gnat, the green Graſhopper, the brown Hackle, the dun Graſhopper.

July. The Orange-fly, the Badgers-fly, the Waſp-fly, the little white dun, the black Hackle, the black brown dun, the Shell-fly.

Auguſt.

Auguſt. The Fern-fly, the late Ant-fly, Harry-long-leg, the white Hackly.

September. The late Bagger, the Camel brown Fly.

October. The ſame Flies that were uſed in *March.*

Artificial Flies how to make them, and the Seaſon they are to be uſed in.

IN *April* a Stone-fly is in Seaſon, the body of it is made with black Wooll, made yellow under the Wings, and under the Tail, the Wings made of Mallards Feathers.

May at the beginning, a ruddy Fly is in Seaſon, make the body of red Wooll wrapt about with blew Silk, the Wings make of the Wing of a Drake and a red Hackle.

The yellow or green Fly is made of yellow Wooll, his Wing made of red Hackle and the Wing of a Drake.

The dun Fly is made of black Wooll, and ſometimes dun, in ſeaſon in *March*, his Wings made of Partridge Feathers, black Drake's Feathers, and the Feathers under his Tail.

The black Fly in ſeaſon in *May*, made of black Wooll, and wrapt about with Peacock's Tail: his Wings the Feather of the Wings, of a brown Capon, with the blew Feathers in his Head.

In *June* the ſaid yellow Fly is in ſeaſon, made of black Wooll with a yellow Liſt on either ſide, the Wings of a Buzzard, bound with broken Hemp.

Alſo the Mooriſh Fly in ſeaſon in *June*, made of duskiſh Wooll, the Wings the black Feathers of a Mall Drake.

Alſo in the middle of *June*, the Taring Fly made of Bear's Wooll, the Wings made contrary one againſt the other of the whitiſh Feathers of a Mall Drake.

In *July* the Waſp Fly in ſeaſon, made of black Wooll, wrapt about with yellow Silk; the Wings made of the Feathers of a Buzzard or Drak.

The Shell Fly good in the middle of *June*, made with greeniſh Wooll, wrapt about with Pearls of a Peacock's Tail, the Wings made of a Buzzards Feathers.

The dark Drake Fly, made of black Wooll, wrapt about with black Silk, in ſeaſon in *Auguſt*; the Wings made of the Feathers of a Male Drake with a black Head.

The *May* Fly, made of greeniſh coloured Cruel or Willow Colour, and darken it in moſt Places with waxed Silk or ribb'd with a black Hair, or ſome of them ribb'd with a Silver Thread, and ſuch Wings for the Colour, as you ſee the Fly to have at that Seaſon.

The Oak Fly, the Body made of Orange paring and black Cruel; the Wings, the brown of a Mallard's Feathers.

To take Pikes.

TAke what quantity of blown Bladders you pleaſe, and at the mouth of it tie a Line longer or ſhorter, as the Water is in depth, bait your Hooks Artificially, and put them into the Water, and as the Wind blows them gently, the Pike will ſtrike himſelf, and make pleaſant Diverſion, by flouncing about, when ſpent take him out, the ſame may be done by tying your Line at the Leg of Ducks or Geeſe.

To take a Pike as he lies ſleeping and ſunning in fair Weather, with a Loop or Net.

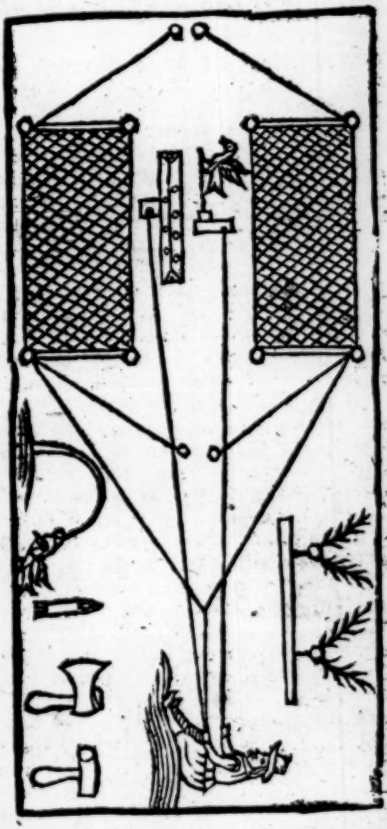
M*Arch* and *Auguſt* is the beſt time: Take a long Pole or Rod that is light and ſtrait, on the ſmall end faſten a running Loop of twilted Horſe-hair and Silk, or made of Wyre of a large Compaſs, which gently draw on him, and when it is 5 or 6 Inches over his Gills, hoiſt him up, if it is a ſmall Pike, draw it not ſo far on, make no Noiſe in walking nor ſpeaking, if he lies ſo that you cannot conveniently nooſe him, touch his Tail with the Rod, and he'll turn as you pleaſe; alſo with a hand Net, putting it gently under Water, guide it juſt under him, and lift it ſoftly till you juſt touch him, and then do it as quick as you can.

Baits for Fiſh.

TAke *Oculus Indiæ*, ſoft Cheeſe and Honey, and Crumbs of White Bread, make it into a Paſte, and throw little Pellets into the Water, and the Fiſh will ſwim above the Water.

Of

Of FOWLING.



LET your Net be made of the beſt Pack-Thread, well twiſted and dry'd, and for great Fowl, let your Meſhes be two Inches at leaſt form point to point, the larger the better, provided the Powl cannot creep through. Let the Net be about 2 Fathom deep, and 6 in length, is the beſt, verge it on each ſide, and at either end; extend it with long Poles, that the lower end of the Poles may be faſtned with a piece of a Line or two Stakes faſt driven into the Ground; And obſerve to do this at the Places where

where Birds feed and haunt in the Mornings, and you may expect Sport.

To take Birds with Lime twigs.

THus you must make it; At Midsummer, peel the Bark from the Holli-Trees, and fill a Vessel and put running Water to it; then boil it over the Fire till the white and grey Bark rise from the green: Take it off the Fire, drain the Water well away, and then separate the Barks, and take the green, lay it on some moist Floor and close Place, and cover it with Weeds, and let it lie about a Fortnight, and in that time it will rot, and turn to a slimy Substance; and then put it into a Mortar, beat it well, and then take it out and wash it in some running Stream, till the foulness is gone. Then put it in a close Earthen Pot, let it stand five days; look to its purging, and scum it. When clean, put it into another Earthen pot, and keep close for use. As for your Setting-dog, it must be elected and trained thus; He must be of good Scent, and love naturally to haunt Fowls, the Land Spaniel is best, being of a good nimble size, and couragious Mettle, which you may know by his Breed; and being of a good Ranger, &c. Then the first Lesson is to make him crouch and lie down close to the Ground, and its done by frequent laying him on the Ground, and saying to him, *Lie close*; and upon his doing well, give him a bit of something to eat, and if he does not well, chastise him with Words not Blow.

Next, To creep to you with his Body, and his Head close to the Ground, by saying, *Come nearer*, *Come nearer*, or such Words, to understand and do it, and intice him with shewing Bread, and the like, thrusting down any rising part of his Head or Body, and threatning him roughly if he flies far, with a good jerk or two with a Whip-cord to reclaim his Obstinacy.

And repeat his Lessons, and encourage his well doing, and you may exercise him in the Field, as you walk along, calling him from his Ranging to his Duty, and teach him to follow you close at the Heels in a Line or String, without straining. When he is a Year old, and the Season fit, go in the Field, and let him Range obediently. If he babbles or causelessly opens, correct him by lashing him, or by biting the root of his Ears, when you find he approaches the haunt of his Patridge, known by his whining, and willing, but not daring to open. Then speak and bid him take heed, if notwithstanding this he run in and spring your Partridge, or opens, and so they escape, then correct him severely: Then cast him off to another haunt of

of a Covey, and then if he mend his Error, and you take any by drawing your Net over them ſwiftly, reward him with the Necks, Heads and Pinions of the Partridge.

For your Water Dog, the Inſtruction above for the Setter will ſerve any, by fetching a Glove, or the like, and keep him very much under, and to obſerve your Commands.

The longeſt Barrel is the beſt Fowling Piece, above 6 Foot long, with an indifferent bore, under an Harquebuſe. And obſerve ſhooting with the Wind, and ſide ways, or behind the Fowl, not in their Faces, having your Dog in Command, not to ſtir till you have ſhot.

Small Birds to take; A very good way

YOU muſt take about three handfuls of Wheat Ears, let the ſtraw remain to them about a Foot long, and lime that and not the Ears, then ſtick them up in Frofty Weather, that the Ear may bend, and your ſtraws bend Archwiſe, you may do this in Snow, and ſcatter a little Chaff over it, and faſten down a Bird if you have it, of the ſame kind you deſign to take, let the Ears be ſpread ſingle and then the Birds flocking to pick them, and attempt to fly away, the ſtraw to be ſure laps their Wings, and brings the Birds down again, and this way you may, take great Numbers, you may fix them for Sparrows on Barns or Thatch'd Houſes, and not only get the Birds, but abundance of Corn by deſtroying them. Low Belling. This is chiefly practiſed in open Countries, from *October* till *March*, is the propereſt Seaſons, and the manner is as followeth,

In an evening about 8 or 9 a Clock, when the Moon does not ſhine, take a Low Ball of a moderate ſize, that it may be managed by one Man in one Hand, in having a deep and hollow ſound, you muſt alſo have a Net with ſmall Maſhes about 20 yards long, and as broad as four or five Lands may be covered with it, and you muſt go into Fields where the Stubble has not been much trod; but in high and freſh Wheat Stubble is the beſt. The Bellman muſt go foremoſt, and toll it diſtinctly and dolefully, letting it ſtrike now and then on each ſide, and you muſt follow with the Net born up at the four corners, and on each ſide muſt be carried a Pan of Live Coles without any blaze, and then pitching your Net where you ſuppoſe the Game is: Then make little bundles of Stubble and ſet them on a blaze, or carry Links for that purpoſe; then with making a noiſe or hitting the Stubble, rowſe the

the Fowl, if any be under the Net; So they being entangled you may take them. Then go to another haunt, but you muſt put out the light of the Stubble whilſt you have occaſion for it again. In this caſe the noiſe of the Low bell aſtoniſhes them; and makes them lie ſtill; but the Light makes them riſe by affrighting them, but be ſure you make no other noiſe till you think your Nets are over them.

Batt Fowling the manner of it.

OBſerve where that Birds rooſt in great numbers, as they generally do in Stubs, Hedges or Trees; then go in a dark Night, and have a Wicker with a handle to hold on high, in which Place pieces of Links or great Candles to make a great Light, ſome have a Pan to make a Fire, and carry it at their Back; but then one muſt put Fire on as faſt as it burns out, then let one go with a Pole, and beat the contrary ſide, and two or three be with you, carrying long Boughs; and when they are unrooſted with beating they will come flying about the Light, ſo that they with the Boughs may eaſily ſtrike them down, if among Shrubs, as in a wood, let one on each ſide beat at a pretty diſtance: This muſt be done in a pure ſtill Night.

To take wild Ducks, Geeſe, Herns, Sea-Gulls, *&c.*

DRive a Stake into the Ground two or three Foot long, juſt by the Water-ſide, then take a ſtrong Horſe Hair Line with a large hook faſtned to it, and bait it with Fiſh, or Frog, or Guts, *&c.* And let your Line or Lines lie in the River, and they will ſwallow it, and ſo hang that you may take them, ſome lay in the ſame manner Snares made of Horſe Hair, and often catch them by the Feet as they ſwim about.

Partridge to take.

THE firſt thing yo do is to find the Partridges haunt which is moſtly in ſtanding Corn, where they breed, as alſo in Stubble after the Corn is cut; but in Wheat Stub-

Stubble till it is trodden very much, and then they repair to freſh Barley Stubble, and the Furrow among the Clots, long Graſs and Brambles, are ſometimes their lurking Places. For a Covey of twenty and upwards, in the Winter they ſit in dead Graſs in upland Meddows, or fog under Hedges, or under the Roots of Trees or among Mole Hills, &c. Their haunts are various and uncertain, and tho' ſome by the Eye, by diſtinguiſhing the Colour from the Ground; and others by the Ear, by hearing the Cock call after the Hen, and the Hen's anſwering, and their chattering at joy at meeting; but to find Partridge the beſt way, is as you do the Pheaſant, by the Pipe or Call and they will come near to you, and count their number and then to your Sport: You muſt ſurround your Covey, prepare your Nets, and prick a ſtick faſt in the Ground, and tie the one end to it, and then let your Net fall as you walk briskly round, without ſtopping, and cover the Partridge; then ruſh in and frighten them, and as they riſe they are taken.

To take them with Bird-lime do thus, you muſt call firſt near to their haunts; if anſwered, ſtick your Lime Straws about a Croſs in rows at ſome diſtance from you; then call again, and as they come near to you they will be faſtened by your Straws, and ſo become your Prey. This way is uſed with great ſucceſs in Stubble Fields, from *Auguſt* to *September*, and in Wood. To take them with Rods, and in Paſtures, do as for the Pheaſant. The moſt pleaſing and diverting way of taking Partridges is with a Setting Dog, and he having ſet them uſe your Net, and by this Rule and Method; the Quails, Rails, Moorpoots, &c. Are to be taken and are for Hawk flight too; And here I make an end of the material part of Fowling.

An approved way to dare and take Larks in the day times.

GEt Nets in the form of a Hoop or Scoop Net, ſuch as Fiſhers land Fiſh with, and it muſt be made of fine Thread, but a ſmall Tramel Net will do better. Then carry a Lark Hawk, or Hobby upon a Pole into the Field, where the Larks haunt about Harveſt time; then beat them up with a Dog, and obſerve where the Flocks Light; then creep as cloſe to them as may be, then on a ſudden hold up your Hawk on a Pole, and ſo ſoon as ever they perceive him they will be ſo afraid that you may eaſily draw your Net over them, and they will not offer

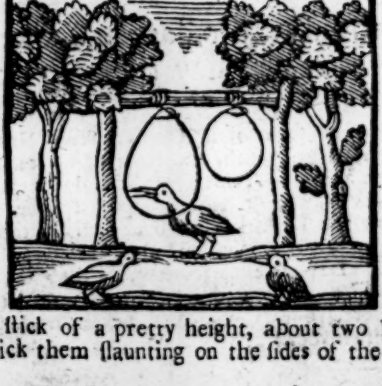
to

to ſtir, for they are ſo fearful of the Hobby which pray on them about this Seaſon, that they will rather let you take them than they will offer to riſe for fear of the Hobby, and you may continue this Sport till *Michaelmas*, then the wild Hobby leaves this Country, or that Exerciſe: and the Lark is more confident and not to be affrighted.

How to take Rooks, Jackdaws and moſt others Birds that pull up and ſpoil the Corn.

TAke thick brown Paper and divide a Sheet into eight parts, and make them up like Sugar Loaves, and then Lime the inſide of the Paper with Birdlime; let them be limed four or five days before you ſet them, then put ſome Corn in them, and lay forty or more of them under the Clods of dirt on the Land, early in the Morning before they come to feed, then ſtand at a diſtance and you will ſee moſt excellent Sport; for as ſoon as a Pidgeon, Rooks, Crows, &c. Come to peck out any of the Corn it will be about his Head, and then he will fly bolt right up very high, and when he is ſpent, come tumbling down as if he had been ſhot in the Air, and you may take them at Plowing time, when the Crows and Rooks follow the Plow, but you muſt then put in Maggots and Worms of the largeſt ſize.

Snares to take Birds and Woodcocks, and how to ſet them and to make them.



TAke a ſtick of a pretty height, about two Foot high, and ſtick them ſlaunting on the ſides of the Furrows; then,

then faſten to them a Horſe-Hair Line, and in Moonſhiny Nights when the Corn begins to ſpring, eſpecially thoſe next the Hedges or Banks, and make a running nooſe in the Line, hanging about 3 Inches from the Ground, and ſet ſeverally; and ſet them abovt 9 Foot diſtance from one another. And when Woodcocks come at ſuch Places as are their uſual Haunts, the Loop being wide enough, the foremoſt will run his Head thorough and finding himſelf entangled by the cloſing of the Nooſe, he will neither cry out nor ſtruggle, but ſtand ſtill till you take him; but you need not take him preſently; for thoſe that follow, tho' going aſide, will turn into the Furrow again, and you may take as many in half an Hour, as you have ſet Snares, if they much haunt the Places, and theſe ſerve for Snipes, near Springs, where they haunt; but then they muſt be higher, and take them as they are alighting; that when they are faſtened they cannot reach the Ground, and you muſt be very ready, or elſe they will get looſe.

Of the Stalking Horſe and Fowling piece.

THE beſt Fowling Pieces are five Foot and half or ſix Foot long, with an indifferent Bore under Harquebuſs, pound your beſt ſort of Powder, and let your Shot be well ſiz'd, and not too big; for then it ſcatters too much: And if too ſmall it has not weight not ſtrength ſufficient to do execution on a large Fowl. In Shooting obſerve always to Shoto with the Wind if poſſible, and rather behind the Fowl or ſide-ways, than full in their Faces; and obſerve you

ſhelter your ſelf behind a Hedge, Bank, Tree, or any thing elſe that may keep you from the ſight of the Fowl; and be ſure to have your Dog at your Heels, and at good Command, not to ſtir after you have Shot, till you bid him; but ſometimes the Fowls are ſo ſhy, there's no getting a-near them, without a ſtalking Horſe, which muſt be ſome old Jade train'd up for that purpoſe, who will gently and as you will, walk along with you, but for want of ſuch a live Horſe you may cut out the reſemblance of one in Canvas, or Match Paper, paſted together a ſufficient bredth and length, with Ears, Legs and Tail, and all the Parts proportionable, which you muſt Paint to the lively Colour of a Horſe, and ſomething like Graſs at his Noſe, and his Head being ſtooping as Grazing, and you may do this either ſtuft or flat, but the latter is more eaſie to carry; there are other things that are uſed for ſhelter in this caſe, as in woody Places, a Buſh in Marſhes and Rivers, Bents or Ruſhes, or ſuch things as grow there: But theſe being unuſual to Motion, you muſt move them very ſlowly, or elſe the Birds will take flight and be gone.

To take Birds or Rabits.

TAke ſeed of Letice, Popy, Henbane and Hemlock, or ſome of them will do, boil them in Dregs of Wine, and then boil ſome Wheat in it, and ſtrow where they come and it will make them drunk, for Rabits uſe Oates.

Eaſie and New Invented Plows.

The diſcription of Trenching Plows.

SIx or ſeven Labouring men, in light Ground it is uſual to have to follow the Plow, and that at ſome diſtance each with their Spades, taking ſome proportion to caſt up the Earth from the bottom of the Fourow, on that was turned over by the Plow. By this means an Acre of Ground may be Plow-trench'd in a day, as well as if it had been wholy done by the Hand; the Plow going before, and turning in the Sword or Turf, and the Spades coming after and covering it with Earth that is light, makes it fit for divers ſorts of Tillage to be Planted in it, this

this saves a great deal of the Charge of Trenching wholy by the Spade.

But there is a Cheaper and easier way to Plow Trench Land, without the Spade at all, and that is, by making your Plow, that it may under cut the Earth, and cast it over, instead of the, usual way of Plowing, for the usual way of Plowing, the Plow is made pointing and is forced under the Sword, and by the spreading of the Plow, and help of the turning board, you force the Earth from-ward which requires much more strength, than if the Plow were made of a bredth proportionable, from the Shares point to it's hinder part, and the Sword or Earth caryed from the bottom, and a turning board cast from-ward; and then you may either add a second Colter, and share to succeed the former (fixt to the very same beam) about 4 or 5 Inches lower, which said second Colter and share will cut and take up another course in the bottom of the Trench, and carry it higher.

And then the turning board will throw it on the first Plowing, or else you may make another to cast higher then the first to follow it. Each of these Plows require but half the strength of the common forcing Plow, for that it Cuts Raises, and casts the Earth over without any side forcing at all.

You may make this Plow 5, 6, or 7 Inches broad, or more according to the Nature of the Ground and strength you design to use, whether 1, 2, or 3, Horses to draw it and it will serve not only to Plow and Plow-Trench Land, but it will also serve to pare off the Turf of Ancient Pasture Land, in order to burn it, for the Foot on which the fore end of the Beam rests, may be made to stand higher or lower as you please to have it; to the end it may cut thicker or thiner; and being as broad, will do that sort of work as well as your brest Plow, and with 6 fold; more speed *Worlidge* says, he has made a model of it, that answers what is here proposed, and had he an Ingenious Assistant should soon bring it to perfection, but these hints he hopes may prove sufficient.

To make a Denshireing Plow.

THis must be drawn by one or two Horses. It must have 2 Wheels or Trundles; If they are low, then let your paring Plow rest on the Axis, but if larger Wheels are found more proper, then fix your paring Plow at some distance under the Axis, and both ways let it have a long stave or handle, that the Labourer by lifting up or pressin

down the ſame, may cauſe the Turf to pare thin or thick as he likes beſt, or as the unevenneſs of the Lands requires, let him Regulate his Labour. This way with one Horſe and 2 men, and a Skillfull-man to Regulate and Guide the Plow, you may pare 2 Acres in a Day or more, if the Ground be but ſmooth and even, but if the Ground is full of Hills, Stumps, &c. It muſt be done over again, and then 2 men and one Horſe may pair the one Acre a Day, as well to the full as with a breſt Plow, and more eaſily and cheap, a fourth part at leaſt both in Charges, and in time an Ingenious Man will quickly amend any Error ſuch an Inſtrument may meet with, and it is ſo Beneficial and eaſy to be done, that I commend it highly to thoſe that may have occaſion.

There is lately a Steel-plow, invented by one dwelling in *Catteaten-ſtreet London*; which with one Man and 2 Horſes or 2 Oxen, may be Plow'd any Land whatever, as ſoon as double the men and Cattle, performed by common Plows, *Worlidge* ſays, he has ſeen the Model, which was well made and true, and Queſtionleſs, will far exceed the common or uſual Plows, and it may coſt 30 or 40*s* extraordinary being of Steel, it will ſoon repay it if 2*s* a Day can be ſaved by it, there is a French Plow, alſo much like our double Plow, already deſcribed, which carry 2 Furrows at once, the Deſcription and uſe you have in *J. Houghtons* Collection of Husbandry, to which I refer you.

To take Moles, kill, Foxes, &c.

Paxamus ſays, that an Earthen Jug or Pot, large Bely'd, and narrow Necked, and put into it Chaf or Straw, Chopt Roſin, Bees Wax, and ſome Brimſtone, and Ceder-wood, mix them together, then ſet them on fire; then put the Neck of the Bottle into one hole, and ſtop all the holes beſides that one, and paſſages where the Moles paſs, your ſmoak Kills them or drives them away preſently.

Another. Take white Helibor, or the Bark of Dogs Cole, which you pleaſe, powder'd, mix it or them with Wheat-flower, or Barly Meal, or Rye-flower, and with Milk and Wine, make it into a Paſte; put this into their holes, and they eat it and it Kills them.

Some keep Cats in Gardens, and tame Weſells, that will deſtroy them:

Some uſe to fill the Holes with Marking-ſtone, and wild Cucumber Juice, and pour it into their Holes.

Some

Some pour Oyl of Lees into their Holes only; *Pliny.*

Some ſet Traps at the mouth of the Holes with Hair.

Some with a Bough faſtned down in the Ground, take them, or take Pitch, Roſin, and Brimſtone, with ſome looſe Tow or Rags, put into an Earth long Neck Pot with a great Belly, Fired and put into their Holes, Stifles them.

Or a deep Earthen Pot let in the Ground in their Stracks, juſt even with the ſurface of the Earth they fall in and cannot get out; if this is wiſely ſet, it takes many, eſpecially in Bucking time, which is about *March.*

Another Incredible way. A Mole catcher and his Boy, in 10 Days time in a Ground of 190 Acres, laid down for Tillage, took near three Buſhels of Old and Young, by caſting up their Nells only, which are always built in a great Heap as big again as the reſt eaſily diſern'd, and then preſently the Old ones would come to look their Young, which he would ſnap up preſently alſo, or, if you have a conveniency of Water bring it over the Ground, and it will deſtroy them as far as it goes.

To kill Moles:

TO take them in Trenches, ſpoils much Ground, therefore take a Mole Spear, or Staff, and where you ſee them caſt, go lightly, but not on the ſide 'twixt them and the Wind, leaſt they hear you, and at the firſt or ſecond putting up of the Earth, ſtrike them with your Mole Staff downright, and mark which way the Earth falls moſt, If ſhe caſt toward you ſtrike ſome what over, If ſhe caſt up toward the Left-hand ſtrike ſomewhat on the Right-hand, and ſo on the contrary, to the caſting up. In plain Ground ſtrike down and there let it remain, then take out the Tongue in the Staff, and with the ſpitle or flat end dig round about your grains to the end thereof, to ſee if you have Killed her, if you have miſt her leave open the Hole, and ſtep a ſide a little, and perhaps ſhe'll come to ſtop the Hole again, for they love but very little Air, and then ſtrike again, but if your miſs her, pour into her Hole a Gallon or two of Water and that will make her come out for fear of Drowning, mind them going out in a morning to feed, or coming home when fed, and you may take a great many.

To take Moles when you Plow:

TAke a ſhe with a large Veſſel full of Water, and when you ſee any new Mole Holes caſt up, being opened

pened with the Plow, pour therein Pitchers or large Cans of Water, and that will make them in a little time come out, and thus you may deſtroy them in Plowed Land or Paſture, in Corn Lands, make Trenches in Spring-time to take them.

To take Moles another way.

IN *March* and *April*, the Ground is ſoft, and they run ſhallow, and alſo after a Rain, and by Bank ſides, and in the Rout of Carts and when you ſee ſuch newly wrought tread it down always ſoftly, and then at her Accuſtomed Hours, which is uſually in Spring-time, from about 6, 8, and 11 in the Morning, and in the Evening about 3, or 4, or 7, ſhe will ſtir up the Earth in the ſaid Trenches, and ſo go from Trench to Trench, and then watch diligently, and hearken, and you will either hear her or ſee her at Work, moving the Earth in the Trench, then ſtop down the broad end of your Staff, croſs the Hole behind her, and with your Foot before her, ſo ſtop the way behind, with your Staff, and before with your Foot, and this takes her up with your Spattle; Moles go abroad generally about Sun Riſing or ſoon after, in Dry or Hot Weather, Moles ſeldom go abroad but in the Morning, but in moiſt Weather, twice a Day, Forenoon and Afternoon, in Frofty Weather they Work under Trees, and thick Hedges and Buſhes, In wet Seaſons and in Winter they lye moſt in wet Banks of Hedges, under the Roots of Trees and in Hills and come out every Morning to go a broad (if it is Dry) 2 or 300 Yards from the Holes, and after an Hour or two feeding return home, then obſerve where they have been, and there make Trenches or chop the Earth down with the Spattle or broad end of the Mole Staff, which he hath before raiſed or paſſed through, and there tread it down with your Foot in your Trenches lightly and the longer the Trenches are the longer ſhe is a paſing through it, make Trenches in the moſt convenient place in the Ground, if you make them neigh their Holes, it is beſt to take them going out, or in going home, make their Trenches along by the Hedge-ſides or Nigh Banks, and Roots of Trees for that is beſt.

Another. Some ſay that in Gendering time, if you lead or draw a Bitch Mole in a String a long the Ground, the Buck will Grice her, and ſo you may Catch them in Pots ſet in the Ground.

Put a dead Mole in their common Haunts, makes them forſake them.

Ano-

Another.

The beſt Inſtrument to deſtroy them is made thus.

TAke a ſmall Board of about 3 Inches and a half broad, and five Inches long, on the one ſide thereof, raiſe 2 ſmall round Hoops or Arches, and at each end, like unto the two ends, Bail or Hoops of a Carriers Waggons, or a Tilt-Boat, large enough that a Mole may paſs through them: in the middle of the Board, make a Hole ſo big that a Gooſe-quill may paſs through, then is that part Finiſhed, then have in a Readineſs, a ſhort Stick, about two Inches an half long, about the bigneſs that the end thereof may juſt enter the Hole into the middle of the Board, alſo you muſt cut a Haſle, or other Stick about a Yard, or Yard and half long, that being ſtuck into the Ground, may ſpring up like unto the Spring they uſually ſet for Fowl, &c. Then make a link of Horſe-hair very ſtrong, that will eaſily ſlip, and faſten it to the end of the ſtick that Spring, alſo have in Readineſs, four ſmall hooked ſticks, then go to the Forrough or Paſſage of the Mole, and after you have opened it, fit in the little Board with the bended Hoops downwards, that the Mole when ſhe Paſſes that way, may go directly through the two, ſemicircular Hoops, before you fix the Board down, put the Hair ſpring through the Hole in the middle of the Board, and place it round that it may anſwer to the two end Hoops, and with the ſmall ſticks, and gently put into the Hole to ſtop the Knot of the Hair ſpring, place it in the Earth in the Paſſage, and by thruſting in the four hooked Stick, faſten it, and cover it with Earth, and then when the Mole paſſeth that way, either the one way or the other by diſplacing or removing the ſmall Stick that hangs, Perpendicularly downward, the Knot paſſeth through the Hole, and the ſpring takes the Mole about the Neck, tho' this deſcription ſeems tedious, yet this is very plain and eaſily performed, theſe Vermin being ſo very prejudicial even worſe to Ground than Swine, I have enlarged the more upon it. And refer you to Mr. *Blith*'s Husbandry, a Book all Husbandmen ought to peruſe, being Reprinted with large Additions.

To take Foxes.

TO take your Foxes, take 2 large Fiſh Hooks and hang them on Branches of Trees, hang them from the Ground, that the Fox may Leap at it before he can catch it, cover it with Beaſt Liver, Fleſh or Chicken, and when he catches at it the Hook holds him, and when you have baited, drag Raw Fleſh a Croſs in his uſual Paths or Hants unto the Gin, and that Excites him to the place of Diſtruction.

Another. Foxes will eat no Hens that have eaten a Fox Liver.

A Spring Trap.

TAke a thick Haſle, ſtick it faſt in the Ground, make a ſtring faſt to the end of it, and to this ſtring make faſt a ſmall ſhort ſtick with a Nick in the lower end thereof, made on the very upper ſide thin thereof, the Pole is bound down with it to another ſtick ſet in the Ground faſt, with a nick likewiſe under, then open the end of the ſtring, ſet it in ſome Dung or where you pleaſe, when the Fox plucks the upper ſtring aſide, then the Nick ſlips, and the Pole ſtarts, and holds him up by the Neck.

To learn a Dog to ſtand upright, and Exerciſe as a Soldier, by taking to the right and left.

BEtwixt your Fingers hold a Piece of raw Fleſh, and thus you may make him run a Figure of 8, or Dance the Hay, having a Whip at each end in your Hand, and ſo off as you ſwing it he will jump over it.

2. If you would make him go Lame of 2 Legs, or on all four, or croſs Leg'd, ſtrike him on the Legs with a ſmall Stick.

To make him Pace, Trot or Gallop.

ABout his Neck tye a ſtring, holding the end in your Hand with a Whip, laſhing to the Left and Right as you pleaſe, and thus you may make him Dance on the Rope, ſtand in the Pillory; go up a Ladder Backward, and what you pleaſe.

Let your Dog be Young that you teach, and very Hungry, and when he is Tractable encourage him, and when otherwiſe beat him well.

FINIS.